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Accounting for sustainability with a focus on materiality and completeness

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Submitted in November 2018

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Abstract

This doctoral research aims to unpack sustainability reporting principles, namely the principle of materiality and the principle of completeness proposed by the Global Reporting Initiative (GRI) G4 guidelines (2013). To this end, the researcher engages with sustainability reporting, transparency and accountability literature and undertakes a two-year fieldwork including 54 interviews in total with corporate sustainability reporting managers, subject matter experts and senior management and a variety of external stakeholders and two non-participatory observations. The academic and empirical contexts will be introduced in the first three Chapters. The thesis then adopts the three-paper approach and thus field materials related to the principle of materiality and completeness are fed into two relatively independent papers (Chapter 4 and Chapter 5). The contribution of the first empirical paper (Chapter 4) is to show how corporate materiality matrix as a form of transparency has the potential to enable dialogue between the reporting entity and its stakeholders. The contribution of the second empirical paper (Chapter 5) lies in the argument that an incomplete corporate sustainability report is not necessarily problematic, as such incompleteness has the potential to be complemented by actions on the ground. Subsequently, drawing upon the methodological challenges that arise in undertaking fieldwork and then in writing up the field materials that underpin the first two papers, the researcher in Paper 3 (Chapter 6) reflects upon the imperfections of interpretive field studies and contributes to the methodological literature by emphasising the need for making such reflections. The thesis will be closed by Chapter 7 with discussions about implications for practice and suggestions for future research.

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One of the luckiest things in my life is to have Stuart Cooper and Chris Chapman as my PhD supervisors. I am sure even when looking backward in 20 years I would still be proud of this!

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Finally, my parents, my grandparents who have passed away, some of my relatives and several old friends in my hometown ZhengZhou China are incredibly important to me, but given their low proficiency in English, I will express my gratitude through other communication channels.

Author's Declaration

I declare that the work in this dissertation was carried out in accordance with the requirements of the University's *Regulations and Code of Practice for Research Degree Programmes* and that it has not been submitted for any other academic award. Except where indicated by specific reference in the text, the work is the candidate's own work. Work done in collaboration with, or with the assistance of, others, is indicated as such. Any views expressed in the dissertation are those of the author.

When submitted to academic journals in future, Chapter 4 (Paper 1) and Chapter 5 (Paper 2) might be co-authored with my supervisors, who provided valuable guidance and comments throughout the development process of these two papers. That said, these two papers as well as the whole thesis are my independent work. All fieldwork was independently undertaken and the thesis was written up by myself.

SIGNED:

DATE:.....

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List of abbreviations

ANT	Actor-Network Theory
AOS	Accounting, Organisation and Society
CAR	Contemporary Accounting Research
DJSI	Dow Jones Sustainability Indices
GRI	Global Reporting Initiative
NGO	Non-governmental Organisation
PhD	Doctor of Philosophy
SR	Sustainability Reporting

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Chapter 1 Introduction and thesis agenda

KPMG (2017) suggests that the rate of corporate sustainability reporting continues to increase and in some developed regions such as the UK the rate of reporting by large listed companies has even exceeded 99%. KPMG further shows that Global Reporting Initiative (GRI) guidelines remain to be the most influential sustainability reporting framework, as it has been applied by 75 percent of the world's largest companies by the time of its 2017 survey. It is even argued that the GRI guidelines in practice set de facto standards for corporate sustainability reporting across the globe (Etzion and Ferraro, 2010). Given such influence in practice, GRI guidelines are widely adopted by accounting academic studies as a measure of corporate transparency in social and environmental aspects (Clarkson et al., 2008; Caron and Turcotte, 2009; Etzion and Ferraro, 2010; Boiral, 2013; Unerman and Zappettini, 2014; Liesen et al., 2015; Edgley et al., 2015). Among the sustainability reporting guidelines provided by the GRI, G4 framework introduced in the year 2013 still plays the most dominant role in practice relative to either its predecessor G3 or its successor GRI Standards, as KPMG (2017) suggests that of the companies that adopt the GRI guidelines, 88% refers to the G4 framework.

Within the GRI G4 document, principles for defining sustainability reporting content, which include stakeholder inclusiveness, sustainability context, materiality and completeness are placed at a prominent location. These reporting principles especially the principle of stakeholder inclusiveness and materiality receive considerable attention in practice. Corporate Reporting Dialogue (2016) invites seven leading-edge reporting guidelines providers, namely CDP, Climate Disclosure Standards Board, GRI, International Accounting Standards Board, International Integrated Reporting Council, International Organization for Standardization and Sustainability Accounting Standards Board to debate the concept of materiality in the context of both financial and non-financial reporting. The principle of stakeholder inclusiveness, which highlights the need for engaging with stakeholders has also long been advocated by AccountAbility (1999; 2008) in its AA1000 standards. The principle of completeness is less officially and explicitly discussed, but the ideal of complete transparency (Roberts, 2009) and the pursuit of presenting a complete sustainability report (Boiral, 2013; Liesen et al., 2015) are argued to be pervasive in contemporary

society. Against this background, this doctoral research aims to unpack how two¹ sustainability reporting principles proposed by the GRI G4 guidelines (2013), namely the principle of materiality and the principle of completeness are understood and operationalised in practice.

To unpack these two reporting principles, the researcher draws on an interpretive methodology (Ahrens and Chapman, 2006; Suddaby, 2006; Power and Gendron, 2015) and uses the fieldwork research method (Silverman, 2013). Qualitative research method is chosen, because it is considered to be more compatible with the exploratory nature of the research aim. It is also because fieldwork research method is underused in the field of sustainability reporting (Hopwood, 2009; Cho et al., 2015) and thus may have greater potential to complement prior literature. The researcher undertakes a two-year fieldwork including 54 interviews in total with corporate sustainability reporting managers, subject matter experts and senior management at public listed companies in the UK and Australia and a variety of their external stakeholders, who are directly or indirectly involved in these companies' sustainability reporting process. The researcher also conducts two non-participatory observations at two breweries of a public listed beverage company. The fieldwork is preceded and accompanied by an analysis of more than 50 corporate sustainability reports, but such analysis is mainly used for preparing and updating interview questions.

The two-year fieldwork provides the researcher with sufficient time to know the concerns about sustainability reporting principles in the field. At late stage of fieldwork, the researcher finds that the value of the materiality principle (assessment) in practice primarily lies in its potential to enable dialogue between the reporting entity and its stakeholders. Meanwhile, interviews about the principle of completeness allows the researcher to see that an incomplete corporate sustainability report is not necessarily problematic in practice, as such incompleteness has the potential to be complemented by actions on the ground. On this basis, the researcher discerns that the interconnection between these two arguments about materiality and completeness is limited, but they have the potential to complement dialogic accountability and legitimacy-based sustainability reporting literature, respectively. For this reason, the three-paper approach is adopted as opposed to the monograph convention. Field materials related to the principle of materiality and

¹ It is worth mentioning that in the original research proposal, the researcher plans to explore all four reporting principles, but the field shows little interest in the sustainability context principle and suggests that the principle of materiality and stakeholder inclusiveness are highly related. As such, the idea of exploring the principle of sustainability context is dropped and the idea of exploring the stakeholder inclusiveness principle is subsumed under the exploration of the materiality principle.

completeness are thus partitioned into two relatively independent papers (Chapter 4 and Chapter 5). The third empirical paper (Chapter 6) concerns interpretive methodology and specifically it aims to reflect upon limitations of interpretive field studies. Its connection with the first two papers lies in that it is the fieldwork that underpins the first two papers that informs the researcher of the need to engage with the imperfections of interpretive field studies. The contributions of all three papers are briefly summarised as follows.

The first paper (Chapter 4) unfolds in the context of corporate materiality assessment and engages with two forms of accountability articulated in the literature, i.e. accountability as transparency and accountability as a dialogic process. In the accountability literature, transparency is argued to be ubiquitous within society but the pursuit of complete transparency is problematic, as it will motivate the reporting entity to engage in managing the appearance whilst leaving their internal operations unchanged (Roberts, 2009), whereas dialogue is a valuable form of accountability but due to power differentials and spatial distance it rarely happens (Roberts, 1991). The paper posits that if we link transparency and dialogue together by leveraging the former as a means for enabling the latter, we can mobilise the strength of them both simultaneously. This is because within the proposition, dialogue can be enabled whilst once transparency is treated as a means, the adverse effects caused by the pursuit of complete transparency can be weakened. The paper contributes to the accountability literature by substantiating this proposition in the context of corporate materiality assessment. It is found that corporate materiality matrix as a form of transparency has the potential to enable dialogue across corporate divisional boundaries as well as between the reporting entity and its stakeholders.

The second paper (Chapter 5) engages with a long-standing debate in the sustainability reporting literature, namely whether sustainability reporting content has a degree of correspondence with the underlying organisational actions. Legitimacy theory and its variants infer that as sustainability reporting is a legitimising tool, the reporting content is disconnected from organisational actions (Neu et al., 1998). This paper contributes to the sustainability reporting literature by problematising this inference in the context of corporate water reporting. Through fieldwork in a listed beverage company, the researcher finds that the case company's water efficiency reporting is not only accompanied by water saving actions inside of its breweries, but also is complemented by a company-wide water risk assessment and the resultant actions to mitigate external water risk. The paper explains the case company's preference to solve problem through actions as opposed to

reporting with reference to the pragmatic view on incompleteness, which suggests that practitioners inherently prioritise action over reporting (Power, 2007). As such, the researcher argues that corporate sustainability reporting is indeed disconnected from organisational actions, but such disconnection can also be understood in the sense of action over reporting.

The third paper (Chapter 6), through interrelating the positivistic proposal for self-reporting limitations of academic work and the interpretive emphasis on the need for making reflections, contributes to the methodological literature by informing accounting interpretivists of the need to reflect upon a series of aspects that may condition their research findings such as researcher's idiosyncrasy, alternative theoretical perspectives and alternative voices in the field. The need for such reflection is urgent as currently interpretive studies' practice of writing limitations is polarised: limitations are either totally left out or only reduced to the concern for generalisability of research findings. The researcher further recommends that Alvesson et al. (2008) provides a useful framework for reflecting upon limitations of interpretive studies and draws on the framework to tease out the limitations of the first two papers of thesis. Another contribution of this paper lies in the argument that self-reporting limitations as a form of reflection is not only valuable for its own sake, but can complement two key notions rooted in the interpretive studies, that is, authenticity and plausibility and has potential to enable dialogue across positivistic and interpretive research paradigms.

While it has been argued that the researcher is primarily directed by the voices in the field to adopt the three-paper approach and engage with the three aforementioned groups of academic literature, that is, accountability, sustainability reporting and methodology, from an interpretive point of view, the come-into-being of academic papers is not only inductively derived from data in the field, but is inevitably influenced by the researcher's pre-understanding and theoretical interests (Burrell and Morgan, 1979; Law, 1994; Ahrens and Chapman, 2006; Suddaby, 2006; Power and Gendron, 2015; Chapman, 2018; Alvesson and Sköldbberg, 2018). Alvesson and Sköldbberg (2018) particularly emphasise that readers of reflexive work are entitled to know the imprints that the researcher's subjectivity and pre-understanding leave on the texts in a deductive manner. Therefore, the following Chapter 2 will introduce key academic studies that have inspired the researcher over the four-year PhD (Doctor of Philosophy) program with a view to contextualising the thesis. Chapter 3 will further contextualise the thesis by elaborating the chosen method and methodology and describing the fieldwork process. This will be followed by three papers presented in Chapter 4,

Chapter 5 and Chapter 6. Finally, the thesis will be closed by Chapter 7 with a reiteration of contributions to the literature, an articulation of implications for practice and suggestions for future research.

Chapter 2 A review of sustainability reporting, transparency and accountability literature

This chapter aims to introduce key papers that have inspired the researcher over the four-year PhD program to help the audience better understand the context of this thesis². The researcher concurs with the vast majority of the papers that will be discussed in this chapter and refers to the phenomenon of disclosing social and environmental information through either a stand-alone report or online platform as ‘Sustainability Reporting’ (SR), but it is worth mentioning that SR is also known as ‘Social Reporting’ (see, Ullmann, 1979) and ‘Environmental Reporting/Disclosures’ (see, Niskala and Pretes, 1995; Neu et al., 1998) in the early days and as ‘Corporate Social Responsibility (CSR) Reporting’ (see, Unerman, 2008) and ‘Sustainable Development Reporting’ (see, Bebbington and Unerman, 2018) more recently. Prior SR studies unfold in a variety of contexts, which at least includes NGOs (see, Boomsma and O’Dwyer, 2018), national accountability reform (see, Cooper and Owen, 2007; Archel et al., 2011) and large listed companies (see, Cho et al., 2015). As this thesis concerns corporate sustainability reporting and accountability practice, the following literature review primarily focuses on the studies that are undertaken in the context of companies. The rest of this chapter comprises two sections, which review studies that examine the SR phenomenon in the label of SR and transparency/accountability, respectively.

2.1 A review of corporate SR literature

According to Gray (2002), corporate sustainability reporting develops from social accounting, which thrived in the late 1970s and the 1980s. Among the early work, Chan (1979) finds that approximately one-fifth of the Fortune 500 companies volunteer to disclose employee safety and health information in their 1976-77 annual reports. He further comments that the quality of these disclosures still has considerable space for improvement as they contain little quantitative data and lack interfirm and inter-period comparisons. Bowman and Haire (1976) examine 82 food-processing companies in the US and find that while 38% of these companies report their CSR activities explicitly, these CSR-related disclosures only take up very limited space (less than 6% of the whole annual report). That said, they identify that companies with a moderate amount of

² For a more systematic review of sustainability reporting and accountability literature, readers could refer to Mathews (1997), Gray (2002) and Parker (2011).

social disclosures are more profitable than their counterparts with either little or extensive social disclosures. On this basis, Bowman and Haire (1976) argue that investors start to be concerned about corporate social performance and relevant disclosures. Further, Dierkes and Antal (1985) investigate the usefulness of social disclosures to other constituency groups such as employees, government agencies, unions, consumer protection groups and environmentalists. They find that these groups strongly support the idea of social reporting whilst expressing reservations about the usefulness of such disclosures in practice as some important information is missing from current reports. Nevertheless, Dierkes and Antal (1985) insist that even though social disclosures have not been extensively used by the intended constituency groups to make decisions, they have the potential to serve for internal control and management. They formulate the following argument that the researcher believes can have a profound implication even for today's research (p.33):

“The actual process of preparing the report and the act of making it available to the public in itself have an impact on business decision-making. In this sense, the social report functions similarly to the traditional financial report — its existence serves to monitor and control business behaviour, even without extensive and detailed use by the majority of target groups”.

Another noteworthy aspect in the early social reporting literature is the debate about the motivation of such voluntary reporting behaviour, and the theory of legitimacy is the most controversial point. On the one hand, Hogner (1982) and Lindblom (1983, cited in Guthrie and Parker, 1989) suggest that corporate social reporting is motivated by a concern for maintaining legitimacy. That is to say, social disclosures are mobilised by the reporting entity as an opportunity to provide an explanation and show that they are conforming to the prevailing social and ethical norms and thus the reporting entity can legitimise its operations and activities that would otherwise have been deemed as problematic by the society. On the other hand, Guthrie and Parker (1989) question the adequacy of legitimacy theory as an explanation for the motivation of voluntary social reporting. They focus on a single but influential Australian company (BHP) and examine its social disclosures in annual reports over a 100-year period from 1885. They find that peaks of BHP's social disclosures in history are not always matched with social events and criticism against the company. Therefore, Guthrie and Parker (1989) argue that while legitimacy theory might provide an explanation for the voluntary social reporting behaviour in some cases, such explanation is by no means conclusive.

The early 1990s witnessed an enormous growth of interest in environmental issues in the accounting literature and “this has not been the situation in the past” (Mathews, 1997, p.481).

Among this group of studies, Harte and Owen (1991) identify that there is an increase in the quantity of corporate environmental disclosures in the early 1990s. Nonetheless, these disclosures are more general statements than detailed evaluation of the reporting entity's environmental performance. Another two unconvincing aspects of these environmental disclosures are that most of the information is unaudited and there is an apparent lack of self-reported bad news about the reporting entity's environmental performance. These findings allow Harte and Owen (1991) to conclude that corporate environmental reporting then is far from being representative of public accountability. Similarly, Niskala and Pretes (1995) note that the level of corporate environmental disclosures increased significantly from the late 1980s to the early 1990s, but these disclosures are dominated by qualitative information. As such, while Niskala and Pretes are optimistic about the future of environmental reporting, they criticise corporate reporting practice then for its lack of quantitative and monetary disclosures. Huizing and Dekker (1992) analyse an environment report produced in 1990 by a Dutch company, which attempts to quantify the company's environmental impacts in financial terms. The company constructs a net value added account, which measures the difference between the company's net profit and the monetised environmental impacts. While there is no doubt that this is an innovative attempt in the early 1990s, such quantification practice is criticised for involving too many estimations and the failure of incorporating indirect environmental impacts.

Another aspect that deserves our attention is that relative to the early social reporting studies, most of which are descriptive in nature, environmental/sustainability reporting literature tends to lift data to the theoretical level (Gray, 2002). Among these studies, legitimacy theory and its variants such as stakeholder theory are the most dominant perspectives. As an example, Patten (1992) identifies that an environmental incident committed by a single company is perceived as a threat to the legitimacy of the whole industry and thus companies in the same industry increase their environmental disclosures dramatically afterwards to address such a legitimacy threat. On this basis, he argues that corporate environmental reporting is a legitimising tool. Further, Patten (2002) and Cho and Patten (2007) find that corporate poor environmental performance will lead to more environmental disclosures and therefore they argue that companies may increase the number of their sustainability disclosures to address the poor environmental performance with a view to maintaining their legitimate position within society. Relatedly, De Villiers and Van Staden (2006) argue that reducing the volume and specifics of corporate sustainability disclosures can also serve

for the purpose of legitimising inappropriate actions. This is because detailed disclosures are more likely to contain sensitive information and are liable to result in legitimacy threats. Similar legitimacy-based argument can also be seen from O'Donovan (2002), Milne and Patten (2002), Laine (2009), Cho (2009) and Aerts and Cormier (2009).

It is also argued that legitimacy theory and stakeholder theory are interrelated in terms of explaining motivations of sustainability reporting, as the former views society as a unitary whole, whereas the latter sees society as consisting of multiple and diverse groups (Deegan, 2002). Roberts (1992) argues that stakeholder theory can be used to interpret sustainability reporting phenomenon, as it is found that the level of corporate sustainability disclosures is significantly conditioned by the expectations of three powerful stakeholder groups, namely investors, government and creditors. Along the same line, Neu et al. (1998) find that shareholders and regulators are much more powerful than environmentalists in terms of influencing the level of environmental disclosures in corporate annual reports. Their findings are complemented by Deegan and Blomquist (2006), who argues that non-financial stakeholders such as NGOs can also influence the level of corporate sustainability disclosures. In the year 1999, WWF developed a set of criteria in the form of a scorecard to assess the quality of Australian mining companies' environmental disclosures. Deegan and Blomquist (2006) find that these mining companies are willing to improve their environmental disclosures especially in the areas that are scored poorly by WWF such as community consultation and external verification.

Clarkson et al. (2008) is one of the few papers that contests legitimacy theory in the context of environmental reporting. They develop a set of detailed evaluative criteria with reference to the GRI checklist to mark the level of corporate environmental disclosures and find a positive correlation between corporate environmental performance and their environmental disclosures. On the basis of this result, Clarkson et al. (2008) argue that corporate environmental disclosures can be better explained by voluntary disclosure theory. This theory suggests that companies with good environmental performance are more likely to report environmental information, as by doing so they can distinguish themselves from their peers with relatively poor environmental performance.

The understanding of the sustainability reporting phenomenon in the accounting literature is also enriched by institutional theory. Unlike the aforementioned legitimacy, stakeholder and voluntary disclosure theories, institutional theory downplays human agency, which means that sustainability

reporting practice is not deemed as purposive but is passively homogenised by institutions (Larrinaga, 2014). Institutions may take on a variety of forms such as regulatory mechanism, which means sustainability information is disclosed for the purpose of complying with the regulation, normative mechanism, which means sustainability reports are prepared as this is perceived by companies as a ‘right thing to do’, and cognitive mechanism, which means sustainability information is disclosed as managers follow a set routine (Larrinaga, 2014, p.277). These arguments are substantiated by Bebbington et al. (2009), who in the context of New Zealand’s large companies identify that all three types of institutions exert an influence on corporate sustainability reporting practice. In addition, at policy level, Etzion and Ferraro (2010) longitudinally analyse GRI’s efforts to institutionalise global sustainability reporting practice since its inception in 1997. They conclude that GRI owes its ‘success’ to the effective use of analogy with financial reporting. They find that in the early stage GRI tends to emphasise the similarity between sustainability reporting and financial reporting and highlight the market logic with a view to gaining support of vested interest groups and legitimacy whereas after 2002 when GRI had established a degree of legitimacy, it started to emphasise the incongruence between sustainability reporting and financial reporting and the importance of civil society’s information rights. Through the GRI case, Etzion and Ferraro (2010) argue that innovators’ symbolic actions in the early stage of an institutionalisation process deserves more understanding as these symbolic actions serve as a means for realising substantive changes in later stages of the cycle.

Another insight we can borrow from institutional theory is the thesis of ‘decoupling’, which according to Power (1997) and Roberts (2017) suggests that organisational reporting and monitoring systems are not representations of internal operations but are institutionalised products. A reporting system may be built up only to serve for meeting institutional rules and thus gaining external support and legitimacy whilst the reporting entity’s internal operations remain unchanged. In this regard, the researcher argues that legitimacy theory and institutional theory have a degree of similarity. The decoupling thesis resonates with several other studies, which while drawing on a more nuanced theoretical lens, also insist that corporate sustainability reporting content is disconnected from organisational actions. As an example, Boiral (2013) finds that while their case companies’ sustainability reports are replete with positive environmental performance, a large amount of negative information about these companies appears in the media. A limited amount of adverse information is reported by these companies, but placed in the inconspicuous locations of

their sustainability reports and thus is liable to be overlooked. On this basis, Boiral (2013) argues that corporate sustainability reports are simulacra, which are disconnected from organisational actions and impacts.

Moreover, Cho et al. (2015) argue that content of corporate sustainability reports can be divided into three types of organisational façades, that is, the rational façade that aims to maximise shareholder value, the progressive façade that focuses on externalities caused by the operations of the case companies and the reputation façade, which highlights the importance of social and environmental stewardship. They find that corporate talk and actions are consistent under rational façade, but disclosures about progressive and reputational façades are not always consistent with tangible actions. These arguments are complemented by Christensen et al. (2013), who view the decoupling of sustainability talk and action in a positive way. Whilst concurring with most of the aforementioned studies and suggesting that corporate sustainability reporting and action may be decoupled, Christensen et al. (2013) argue that such disconnection is not necessarily a problem, because sustainability talk can be aspirational, performative and has the potential to stimulate future sustainable actions.

Up to this point, the researcher has provided a brief review of sustainability reporting history in the accounting literature, followed by the articulations of three most widely adopted theoretical lens, that is, legitimacy theory, stakeholder theory and institutional theory. To further unpack sustainability reporting phenomenon, in what follows the researcher will review another group of literature that investigates corporate sustainability reports in the name of transparency and accountability.

2.2 A review of transparency and accountability literature

Apart from the aforementioned SR literature, corporate SR phenomenon is also examined by another group of studies in the name of transparency and accountability (see, Gray, 1992; Roberts, 1991; Roberts, 2001; Unerman and Bennett, 2004; Cooper and Owen, 2007; Roberts, 2009; Radcliffe et al., 2017). While none of these studies provide a precise definition for transparency, the researcher through reading these papers discerns that transparency can be understood as the supply and demand of information through written form financial or sustainability reports.

Gray (1992) is an influential early work that emphasises the importance of transparency. He (p.414) argues that it has been widely acknowledged that society has a right to know to what extent

companies are complying with the law and other regulations and suggests such information might be “extended from law and quasi-law to public domain matters of substance”. He (p.415) further asserts the need for more transparency:

“The development of accountability also increases the transparency of organisations. That is, it increases (or, in the green vision, should increase) the number of things which are made visible, increases the number of ways in which things are made visible and, in doing so encourages an increasing openness. The “inside” of the organisation becomes more visible, that is, transparent...For the deep green vision, transparency and, thus, the right to information about actions which influence the society, other societies, future societies or the biosphere is not in question. This information must be in the public domain”.

Cooper and Owen (2007) further look into the transparency of corporate sustainability reports. They find that while most corporate sustainability reports have shown that these companies have undertaken extensive dialogue with stakeholders, there is an apparent lack of transparency in whether such dialogue can meaningfully inform certain aspects of corporate decisions to be made in the interests of non-financial stakeholders. Without such transparency, one within reason could be sceptical that when the claim of stakeholders conflicts with the interest of shareholders, “the standard ‘capitalist rules of the game’ are more likely to apply” (Cooper and Owen, 2007, p.656). Common to Gray (1992) and Cooper and Owen (2007) is that they both invest a basic degree of trust in the potential of transparency to generate a positive effect, though neither of them spell this out explicitly. This is further complemented by Roberts (2001, 2009), who explains that transparency is able to provide reasons for corporate conduct and thus can be mobilised to cope with corporate internal collusion and build trust with remote stakeholders. Radcliffe et al. (2017) add that society at large may expect that transparency will subject reporting entities to a degree of public scrutiny and result in organisational self-control.

While Roberts (2009) and Radcliffe et al. (2017) recognise the strengths of transparency, they emphasise that this does not always mean, the more transparency the better. Specifically, Roberts (2009) argues that sometimes the failure of internal governance may not be remedied by increasing the number of financial or non-financial disclosures. Radcliffe et al. (2017) provide more evidence on this point, by contrasting the increasing number and sophistication of financial disclosures in the ‘progressive era’ (1895-1925) with persistent corporate governance failures during the period. In addition, it is argued that excessive requirement for transparency could be an ethical violence to the accountant, as some actions may be unconsciously done and thus are unaccountable (Messner, 2009).

The problem with transparency has also been identified by the proponents of Actor-Network Theory (ANT). Robson (1992) and Chua (1995) suggest that transparency in accounting reports is a product of a generative process and inevitably involves simplification, translation and de-contextualisation. Based on this argument, readers could question the adequacy of transparency/accounting reports/performance indicators as a complete and neutral representation of organisational reality. As knowledge accumulates, Busco and Quattrone (2018) further point to the value of beginning with acknowledging the incompleteness of accounting reports and explores how such incompleteness can engender an effect. In this regard, Jordan and Messner (2012) find that transparency in incomplete performance indicators will allow subordinate managers to identify such incompleteness and entice them to question the adequacy of these indicators as the criteria of their performance evaluation. Relatedly, Dambrin and Robson (2011) find that it is the lack of transparency in performance indicators that ensures employees' compliance with the evaluative system.

Up to now, we have added more insights into the sustainability reporting phenomenon through the lens of transparency. While there is no absolute divide between sustainability reporting literature and studies in the label of transparency, it is worth noting that the former primarily focuses on unpacking the motivations of SR whereas the latter tends to uncover the effects of SR. Taking them together, we can have a more rounded understanding of the sustainability reporting phenomenon. That said, Gray (2002) points out that prior SR literature and transparency related studies tend to exclusively focus on formal organisational accounts, be it corporate sustainability or financial reports. It is articulated that (p.692):

“I have already noted above the tendency for social accountants to be more pre-occupied with formal, as opposed to informal accounts (a bias not easily justified), and would re-emphasise the tendency to concentrate on the accounts from and/or about (typically large) companies as the accounting entity. This latter tendency probably owes as much to anxiety about the power and influence of business hegemony and, for example, the vast power of the multinational corporations as it does to an unconscious following of the pre-occupations of research into mainstream accounting”.

The narrow focus on formal organisational reports is particularly problematic if we look at the SR phenomenon through the lens of accountability, which is conceptualised as “the giving and demanding of reasons for conduct” (Roberts and Scapens, 1985, p.447). Literally, accountability is defined as a verb, which means that information can be exchanged through formal accounts as well as informal dialogue (Roberts, 1991). For Roberts, dialogue as a form of accountability

includes informal conversation between colleagues during tea time. Face-to-face dialogue like this is more likely to encourage collegiality and humanise work. Roberts (2001) adds that it is equally important to engage in dialogue with external stakeholders, as this will render senior management to be more concerned about their surrounding communities. Roberts (2003) further puts forward a concept called “extra-corporeal accountability”, which urges companies to have face-to-face dialogue with vulnerable stakeholders, especially those who are being affected by their operations.

Beneficial as the dialogic form of accountability is, it is built upon two assumptions: “a relative absence of asymmetries of power, and a context for the face-to-face negotiation” (Roberts, 1991, p.362). Roberts himself, however, recognises that the idea of viewing accountability as face-to-face dialogue is too idealistic (Roberts, 1991). Similarly, Unerman and Bennett (2004) also argue that duties of corporate accountability can be discharged via dialogue with a wide range of stakeholders. They suggest that stakeholder dialogue should allow “all stakeholders (irrespective of economic power) an equal opportunity to participate in a debate” and “ensure the voices of all stakeholders were taken into consideration” (p.688). Slightly different from the work of John Roberts, Unerman and Bennett (2004) suggest that dialogue is not confined to face-to-face contact, but can be realised via web forum. This will allow companies to reach broad and remote stakeholders and make the marginalised voices heard. While we have learned that dialogue is not necessarily limited to face-to-face contact, it is repeatedly emphasised in the literature that dialogue is highly subject to power differentials within the hierarchised modern organisations (Roberts, 1996). Subordinate managers are accountable for senior management rather than reciprocally (Roberts and Scapens, 1985). The dialogue that runs counter to the will of people in power will be closed (Cooper and Owen, 2007).

We have learned that dialogue as an information exchange channel has been argued to be as important as formal organisational accounts. We have also reviewed the strengths and weaknesses of the dialogic form of accountability. Finally, it must be noted that some human actions are unconsciously done, which means that words, be it formal accounts or informal dialogue, cannot provide a complete description of ourselves, that is also to say, in some occasions we exchange information with or make ourselves known to others through actions (Messner, 2009). Parker (2014) investigates the possibility of achieving corporate social accountability through actions by looking at British industrial pioneers’ philanthropic activities. He finds that these industrial pioneers have a deep religious belief, which requires them to account to God about how they help

the poor and share resources with others. As a result, these industrial pioneers not only conduct philanthropic actions but also do these good deeds ‘quietly’, because they believe that without publicity their kindness will equally be seen by God. As such, Parker argues that accountability can be rendered through not only talk but also through action.

To sum up, this chapter introduces key papers that guide the researcher over the four-year PhD program. The chapter begins with a brief review of the sustainability reporting history, followed by an articulation of three most widely adopted theoretical perspectives in this area, namely legitimacy, stakeholder and institutional theories. To further unpack the sustainability reporting phenomenon, the researcher subsequently reviews another group of literature, which interrogates SR through the lens of transparency and accountability. Finally, it is worth noting that not all of these studies are cited in the following three papers (see, Chapter 4, 5 and 6), because this is an interpretive study and follows an abductive logic, that is, the come-into-being of the three papers are conditioned by the combination of the aforementioned literature as well as field materials (Ahrens and Chapman, 2006). The following Chapter 3 will further contextualise the thesis by introducing the adopted interpretive methodology and fieldwork process.

Chapter 3 An introduction of interpretive methodology and fieldwork research method

We have reviewed the literature that has inspired the researcher over the four-year PhD program in Chapter 2, but interpretive methodology suggests that research is an iterative process of knowing between theory and data (Suddaby, 2006). Therefore, research findings are conditioned by not only academic literature that influences the researcher, but also by the data that the researcher encounters in the field. This chapter serves to present the research and fieldwork process for readers to better understand the empirical context, but such description will be preceded by a brief introduction of the chosen interpretive methodology and fieldwork research method.

3.1 Interpretive methodology, fieldwork research method and research ethics

Burrell and Morgan's (1979) seminal work proposes that positivism and interpretivism are two fundamental sociological paradigms with mutually exclusive assumptions about the nature of science and society. Positivism assumes an existence of an objective reality and suggests that stable causal law can be objectively extracted by the researcher from the reality through rigorous research methods, whereas interpretivism insists that social reality is subjectively constructed and highlights the role of the researcher and the importance of theories in shaping knowledge. This thesis pertains to the interpretive paradigm, but it is worth emphasising that interpretivism together with this thesis never negate the existence of the reality beyond the researcher's spiritual world (Ahrens and Chapman, 2006). The distinctive feature of interpretivism lies in the flexibility it affords the researcher to seek for alternative and meaningful interpretations of the social phenomenon (Power and Gendron, 2015). This thesis is argued to be a product of interpretivism, as the researcher has been continuously led by the concern as to whether the intended theoretical interpretations have the potential to add insights into the SR and accountability phenomenon throughout the doctoral program.

Hammersley (1992) suggests that the choice of research methods depends on the aim of the study and the availability of the data rather than an ideological commitment to any single research approach. This thesis adopts the fieldwork research method, which includes interview, non-participatory observation and documentary analysis. The fieldwork research method is chosen, because the researcher is interested in exploring sustainability reporting managers' understandings of the sustainability reporting principles provided by the GRI G4 (2013) guidelines and interview is argued to be particularly fit for exploring people's perceptions (Briggs, 1986). Another reason

for adopting the fieldwork approach is that of all the studies reviewed in Chapter 2, only Archel et al. (2011), Bebbington et al. (2009) and Deegan and Blomquist (2006) resort to field materials. The apparent lack of field studies in the SR and accountability literature is discerned by Hopwood (2009, p.438), who contends that:

“A variety of motives may well be implicated in the production of environmental and sustainability reports. Exploring these further is likely to be a very complex task requiring the use of both analytical and historical insights. Detailed internal case studies could also be useful”.

Unerman and Chapman (2014), Cho et al. (2015) and O’Dwyer and Unerman (2016) reiterate that SR literature calls for field studies to add more insights. As such, the researcher decides to undertake fieldwork in a bid to better complement prior SR literature.

During fieldwork, the researcher draws on the semi-structured interview approach. The researcher enters the field with prepared semi-structured interview questions with a view to knowing the context of sustainability reporting in practice. These preliminary interview questions are listed in Section 3.2. Myers (2009) suggests, semi-structured interview gives interviewees an opportunity to add more insights during the conversation whilst the pre-prepared questions can provide the focus and ensure the basic scope of the interview. Similarly, in the accounting literature Kenno et al. (2017) reiterate that the semi-structured interview approach not only allows the researcher to focus on a predetermined research topic, but also provides an opportunity for the researcher to follow the interests of informants. After undertaking 10 to 15 semi-structured interviews, the researcher became familiarised with the context of sustainability reporting in practice. Then the original interview protocol was updated, which means that some deductively derived interview questions were dropped and in the interview the researcher focused more on discussing issues that interviewees are interested in. In this regard, Silverman (2013, p.204) points out that deviance from the original interview protocol is “not seen as a problem”, “but are often encouraged”.

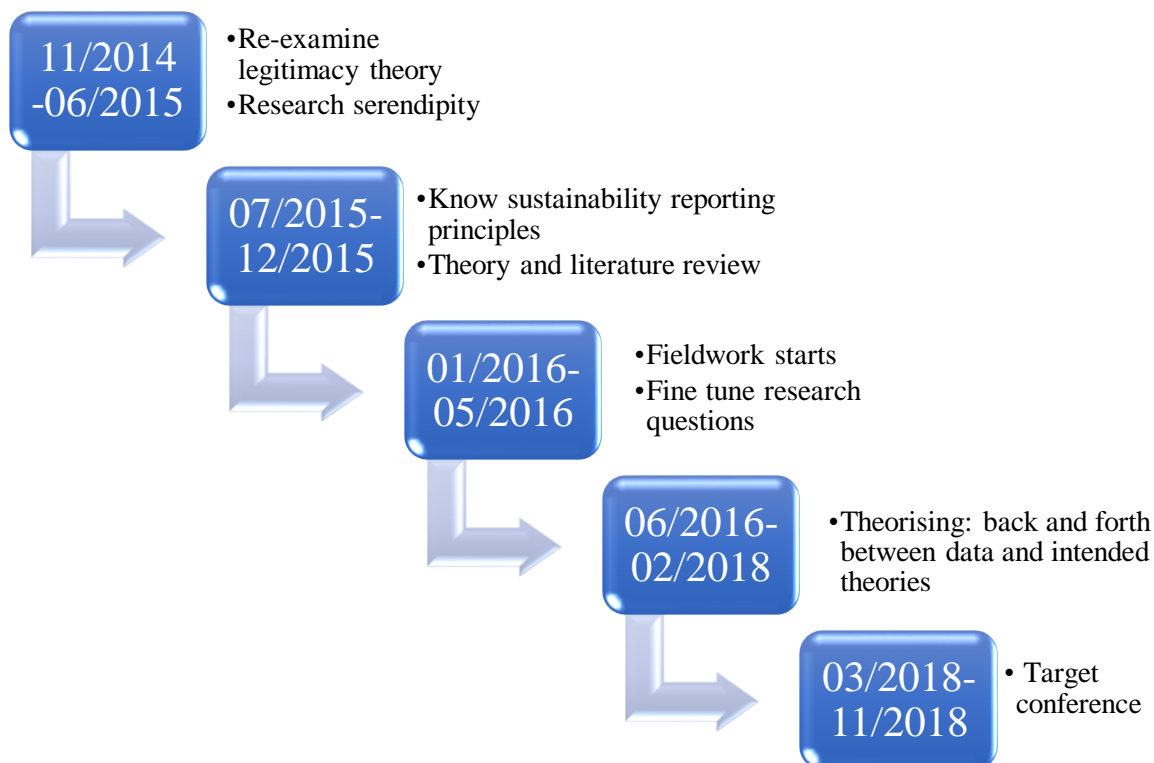
Research ethics is particularly important to the fieldwork research method. Research ethics in general requires researchers that “do unto others as you would have them do unto you” (Myers, 2009, p.46). In terms of qualitative field study, research ethics mainly concerns “respect and protection for the people actively consenting to be studied” (Payne and Payne, 2004, P.66). In the process of fieldwork, the researcher follows the ethical guidelines provided by Silverman (2013) and Kenno et al. (2017) and thus complies with at least three principles: introducing the research

aim and scope for interviewees in advance of interview; emphasising that participation in the interview is completely voluntary and that interviewees are free to withdraw at any time without providing any reason; interview transcripts will be treated as completely confidential and interviewees' name and the name of their respective organisations will not appear in this thesis nor in any future publications. The researcher's proposal for undertaking fieldwork has been reviewed by the Research Ethics Committee at the University of Bristol and ethical approval was received on the 17th December 2015.

3.2 An overview of the PhD process and research serendipity

This section aims to describe the research process, through which this PhD thesis is produced to further help the reader understand the context of the following three papers (Chapter 4, 5 and 6). As is listed in Flow Chart 3, the come-into-being of this thesis went through at least five phases constructed as follows.

Flow Chart 3: Five phases of the PhD process



The researcher's PhD program began in November 2014. Inspired by Cho and Patten (2007), the researcher was then interested in re-examining legitimacy theory, by looking at the relationship between corporate water disclosures and corporate water performance. Although this idea was

dropped due to the failure of finding a reliable measure of corporate water performance, during this period the researcher undertook an indexing analysis of more than 20 corporate sustainability reports³. On this basis, it was discerned that four sustainability reporting principles provided by the GRI, that is, materiality, stakeholder inclusiveness, completeness and sustainability context, play an important role in shaping the content of corporate sustainability reports. To familiarise readers with the empirical context, these four reporting principles are listed as follows:

The principle of materiality requires sustainability report to “reflect the organization’s significant economic, environmental and social impacts; or substantively influence the assessments and decisions of stakeholders” (GRI G4, 2013, P.11).

The principle of stakeholder inclusiveness requires that “the organization should identify its stakeholders, and explain how it has responded to their reasonable expectations and interests” (GRI G4, 2013, P.9).

The principle of completeness requires that “the report should include coverage of material Aspects and their Boundaries, sufficient to reflect significant economic, environmental and social impacts, and to enable stakeholders to assess the organization’s performance in the reporting period” (GRI G4, 2013, P.12).

The principle of sustainability context requires that “the report should present the organisation’s performance in the wider context of sustainability” (GRI G4, 2013, P.10).

It is worth noting that the principles of materiality and inclusivity are also recommended by Dow Jones Sustainability Indices and AccountAbility (2008), respectively. As their recommendations are similar to the definition provided by the GRI, the researcher will not go into details of them here. The interest in these four reporting principles helped the researcher formulate the earliest version of the research questions, that is, what are the sustainability reporting managers’ understandings of these reporting principles and how are they operationalised in practice.

Such research interest further led the researcher to the second research stage. This stage was primarily devoted to reviewing SR, transparency and accountability literature. Apart from the literature that is reviewed in Chapter 2, the researcher was then also highly inspired by Latour

³ As the idea of examining the correlation between water reporting and water performance failed to materialise, the result of this indexing analysis is not included in the thesis but it can be provided upon request.

(2004). Latour (2004) provides a due-process model, which is constituted of four stages, that is, ‘perplexity’, ‘consultation’, ‘hierarchy’ and ‘institution’. It suggests that all institutionalised entities (institution), be it human or non-human actors, begin with matters of concern (perplexity) and will be followed by the process of discussing these matters of concern (consultation) and deciding their relative importance (hierarchy). While this due-process model was not used in any of the following three papers, it informed the researcher to think about the potential connection between inclusivity and materiality principles. In other words, the researcher then wondered if stakeholder dialogue can further inform corporate decision-making. It is also during this stage that the researcher decided to adopt the interpretive methodology and use fieldwork research method to explore SR managers’ understandings of these reporting principles. Interview questions had also been prepared in the meanwhile, but interviews were not attempted until the research ethical approval was granted by the Research Ethics Committee on the 17th December 2015. The preliminary semi-structured interview questions are listed as follows:

Table 3.1 Interview questions

<p>Introduce myself and the research topic and ask consent for recording.</p> <p>General questions:</p> <ol style="list-style-type: none"> 1. Could you please tell me a little about your experience related to sustainability reporting? 2. Could you please introduce the context of your company’s sustainability reporting? For example, which reporting guidelines are you referring to?
<p>Specific questions related to the four sustainability reporting principles:</p> <p>Sustainability context</p> <ol style="list-style-type: none"> 1. What do you understand by the principle of sustainability context? 2. Can you talk about this principle in the context of water disclosures? <p>Materiality</p> <ol style="list-style-type: none"> 1. What do you understand by the materiality principle? 2. What are the materiality criteria in the company for environmental disclosures? 3. How does the company decide the relative importance (materiality) of sustainability issues? Can you provide an example? 4. Who decides the relative importance (materiality) of sustainability issues? 5. Can you talk about the influence of the materiality principle on your company’s reporting practice? Can you provide an example? <p>Inclusivity</p> <ol style="list-style-type: none"> 1. What do you understand by the inclusivity principle? 2. Which stakeholders does your company consult most with in the sustainability reporting process? 3. How do you identify these stakeholders? 4. What kind of information are stakeholders most interested in? 5. Do you think such stakeholder dialogue can inform corporate decision-making? <p>Completeness</p> <ol style="list-style-type: none"> 1. What do you understand by the completeness principle? 2. Do you think it is important to provide a complete sustainability report?
<p>Closing questions</p> <ol style="list-style-type: none"> 1. We may now forget my interview questions. Can you talk about the aspects related to sustainability reporting that you are most interested in?

2. Are there any other questions you think I should be asking?

The researcher then defines the period between January and May 2016 as the third research stage. The aim of this stage is for the researcher to know the context of sustainability reporting in the field and ‘test’ the appropriateness of the research and interview questions. The researcher chose sustainability reporting managers, subject matter experts, senior management in the division of sustainability at FTSE 350 companies and ASX 200 companies and their external stakeholders as potential interviewees. After completing 10 to 15 interviews, the researcher discerned that the field showed little interest in the sustainability context principle and that the principle of materiality and stakeholder inclusiveness were deemed as related, as they both aim to enable reporting entities to engage with their stakeholders. It was also found that while actors in the field have little understanding of the completeness principle provided by the GRI, they were interested in debating with the researcher about the usefulness of preparing a ‘complete’ sustainability report. According to these emic views, the researcher updated the original research propositions as follows: the idea of exploring the sustainability context principle was dropped; the idea of exploring the completeness principle was kept; and the idea of exploring the materiality and stakeholder inclusiveness principles were combined into a research question as to how corporate dialogue with stakeholders can be enabled.

With the updated propositions, the researcher stepped into the fourth stage commencing June 2016. This stage is an iterative process of knowing between field materials and intended theories. In this stage, interviews became more flexible. The researcher focused on eliciting common concerns from the field and interrogating whether these concerns have the potential to advance our understanding of the SR phenomenon. At the beginning of this stage, the researcher attempted to interpret the enablement of corporate dialogue with stakeholders through the due-process model (Latour, 2004) mentioned in the second stage, but it was found that the model has more potential to describe the dialogic process in practice than add new insights into the sustainability reporting and accountability phenomenon. Because of this, Latour (2004) was not finally used in the following three papers. The researcher was also influenced by legitimacy and stakeholder theories (see, Chapter 2) and found that field materials can support the argument that corporate SR is motivated by a concern for maintaining legitimacy or is driven by the concern of powerful financial stakeholders. Nonetheless, these data were not further developed into papers, because they failed

to pass the filter of interpretivism. In other words, given that considerable studies reviewed in Chapter 2 have demonstrated that legitimacy and stakeholder theories can explain the voluntary SR behaviour, further confirming the correctness of these theories through new data is unable to add insights into the SR phenomenon (Unerman and Chapman, 2014). Over a long-term interrogation, it was found that ANT and particularly the notion of inscription, which highlight the effect of non-human objects, can add insights into the SR phenomenon whilst being supported by field materials. The notion of inscription was then mobilised to interpret the emic voice that corporate materiality matrix (non-human object) has the potential to enable dialogue between the reporting entity and its stakeholders. This forms the early version of the following Paper 1 (Chapter 4).

Meanwhile, the idea of exploring the completeness/incompleteness of corporate sustainability reports was further developed. It was found that the incompleteness of corporate sustainability reports was not experienced as a problem in the field, as an incomplete report has the potential to be ‘completed’ by actions on the ground. This voice in the field runs counter to the inference of legitimacy theory, which problematises corporate SR as it is disconnected from organisational actions (see, Neu et al., 1998; Cho et al., 2015). The contrast between the emic and etic views enabled the researcher to engage with legitimacy theory and this was further developed into Paper 2 (Chapter 5) with reference to a pragmatic view on incompleteness (Power, 2007).

It is also during this stage that the researcher reached consensus with supervisors and decided to adopt the three-paper approach as opposed to the traditional monograph. The primary reason for this choice is that the connection between the principle of completeness and the topic of stakeholder dialogue is weak in the field. As such, it is more appropriate to develop them into relatively independent papers. As these two papers started taking shape, the researcher imagined if the third paper can provide an opportunity to reflect on the limitations of the first two papers and on this basis, make contributions to the methodological literature. This idea was then practised and by the end of this stage, early versions of all three papers had taken shape.

The three papers in total draw on two non-participatory observations at two breweries of a public listed beverage company and 54 interviews with corporate sustainability reporting managers, subject matter experts and senior management across FTSE 350 companies and ASX 200 companies as well as a variety of external stakeholders such as investors, local community

specialists, sustainability analysts and NGO members, who are directly or indirectly involved in corporate sustainability reporting process. The researcher also undertakes an analysis of more than 50 corporate sustainability reports, but these analyses are mainly used for preparing interview questions. These interviews plus two observations are listed chronologically as follows:

Table 3.2 Fieldwork outline

	Date	Role of interviewee	Timings: minutes
1.	02/2016	Water expert	49
2.	02/2016	A member of NGO A	41
3.	03/2016	A member of NGO A	54
4.	03/2016	Water expert	30
5.	04/2016	Sustainability reporting manager	56
6.	04/2016	Head of sustainability	50
7.	04/2016	A local community specialist	76
8.	05/2016	Sustainability reporting manager	30
9.	05/2016	Sustainability reporting manager	46
10.	05/2016	Director of sustainability	50
11.	05/2016	Head of water	44
12.	06/2016	Head of sustainability	80
13.	06/2016	Sustainability reporting manager	52
14.	06/2016	Sustainability advisor	28
15.	06/2016	Director of sustainability	58
16.	06/2016	Sustainability reporting manager	67
17.	06/2016	Sustainability reporting manager	48
18.	06/2016	Sustainability analyst	37
19.	06/2016	Sustainability reporting manager	66
20.	07/2016	Head of sustainability	40
21.	07/2016	Senior manager at an accounting firm	37
22.	07/2016	Specialist community	24
23.	07/2016	Sustainability reporting manager	81
24.	08/2016	Sustainability reporting manager	31
25.	09/2016	Sustainability reporting manager	44
26.	10/2016	Director of reporting	33
27.	11/2016	Water expert	25
28.	11/2016	Head of sustainability	29
29.	11/2016	Sustainability reporting manager	32
30.	11/2016	Sustainability strategy manager	47
31.	11/2016	A member of NGO A	25
32.	11/2016	A member of NGO B	47
33.	12/2016	Sustainability reporting manager	34
34.	01/2017	Water expert at beverage industry association	50
35.	01/2017	Manager at NGO C	49
36.	01/2017	Water expert	52
37.	02/2017	Reporting manager	25
38.	02/2017	Regional Engineering lead	49
39.	02/2017	Global director of energy and water	35
40.	02/2017	Associate Director at NGO B	45
41.	03/2017	Head of water	37
42.	03/2017	Water expert at NGO D	34

43.	04/2017	Plant manager	180 (observation)
44.	04/2017	Accountant	55
45.	05/2017	Reginal Engineering lead	47
46.	05/2017	Vice President	51
47.	06/2017	Vice President	20
48.	07/2017	Plant manager	180 (observation)
49.	10/2017	Director of sustainability	38
50.	10/2017	Head of reporting	39
51.	01/2018	Sustainability strategy manager	30
52.	02/2018	Sustainability reporting manager	42
53.	03/2018	Sustainability reporting manager	30
54.	06/2018	A representative of investors	30

Since early 2018 (the fifth stage), the researcher has started to be concerned about the publishable potentials of all three papers and thus they are assigned with three conferences, respectively. The first paper was accepted by and presented at the 12th Interdisciplinary Perspectives on Accounting Conference in Edinburgh July 2018. The paper will be submitted to Accounting, Organisation and Society (AOS) in the early 2019. The second paper has been accepted by an AOS workshop called ‘Financial Reporting and Auditing as Social and Organisational Practice’ and will be presented at London School of Economics and Political Science in December 2018. This paper also targets AOS and will be submitted to the journal mid-2019. The third paper will be submitted to another AOS workshop called ‘Management Accounting as Social and Organisational Practice’, which will be held in April 2019 Bristol.

Up to this point, the researcher has familiarised the audience with both the academic and the empirical contexts through Chapter 2 and Chapter 3. It is the iterative process of knowing between these etic and emic views that forms the three papers, which will be presented in the following Chapter 4, Chapter 5 and Chapter 6, respectively.

Chapter 4 (Paper 1) Linking transparency and dialogic forms of accountability in the context of materiality (sustainability reporting) matrix

Abstract

Drawing on the notion of inscription, this paper aims to further unpack two forms of accountability articulated in the literature, i.e. accountability as transparency and accountability as a dialogic process. Specifically, the researcher proposes the possibility of mobilising transparency as a means for enabling the dialogic form of accountability. This argument significantly contributes to the accountability literature, because it simultaneously mobilises both forms of accountability. On the one hand, while the value of dialogue has been widely recognised in the literature (see, Roberts, 1991; Unerman and Bennett, 2004), it is unknown as to how the dialogic form accountability will take place regularly in contemporary society. This proposition shows that dialogic form of accountability can be engendered by the power of transparency. On the other hand, the proposition complements the debate about the transparency form of accountability in the literature that focuses on discussing the detrimental effects of pursuing transparency as an end in itself (Roberts, 2009), by showing that transparency in practice can engender positive effects by working as a means for enabling dialogue. This study is situated in the context of corporate materiality assessment and particularly the researcher focuses on the potential of the materiality matrix as a format of transparency to engender the dialogic form of accountability. Through viewing materiality matrices as graphical inscriptions and drawing on the enabling potential of inscriptions, the researcher substantiates the argument that the matrix format of transparency can effectively enable dialogue across corporate divisional boundaries as well as between the reporting entity and their stakeholders.

4.1 Introduction

The demand for greater dialogic form of accountability has been consecutively voiced over the past three decades, as unconstrained conversation can build trust and reciprocal understanding between accountant and accountee (see, e.g., Roberts, 1991; Unerman and Bennett, 2004; Roberts, 2009). Ethical and valuable as dialogue is, we know little about how this form of accountability can be realised in practice, especially in the face of power differentials and spatial distance between members at different organisational levels or between the reporting entity and their stakeholders. More recently, Roberts (2009, 2018) and Radcliffe, Spence and Stein (2017) set out to discuss the adequacy of transparency as form of accountability. Transparency is argued to be ubiquitous within society, because people are prone to imagining that transparency is able to monitor remote others. That said, it is argued that the pursuit of complete transparency is problematic, as this will motivate the reporting entity to engage in managing the appearance whilst leaving their internal operations unchanged (Roberts, 2009) or to manage only with transparency (Roberts, 2017). According to these studies, both forms of accountability have their own inherent strengths and weaknesses: the dialogic form is more desirable but less likely to happen whereas transparency spreads widely but the pursuit of its completeness is problematic. This paper aims to further unpack these two forms of accountability and argue that if we link transparency and dialogue together by mobilising the former as a means for enabling the latter, we can employ the strength of them both. This is because within the proposition, dialogue can be enabled whilst once transparency is treated as a means, the adverse effects caused by the pursuit of complete transparency can be weakened.

This proposition is inspired by Actor–Network Theory (ANT) and particularly the notion of inscription. ANT is not new to accountability studies. With reference to Robson (1992) and Chua (1995), Roberts (2009) argues that transparency in accounting reports is a result of a generative process and inevitably involves simplification, translation and de-contextualisation. As such, the belief in transparency as a neutral and faithful representation of organisational reality is problematised and the adequacy of transparency as a form of accountability is questioned. He (2018) further points out that ANT is a still potentially fruitful lens to unpack the complexity of accountability and calls for future research.

The current study draws on a more recent stream of ANT studies, which contend that the notion of inscription possesses greater potential other than simply being mobilised to critique the

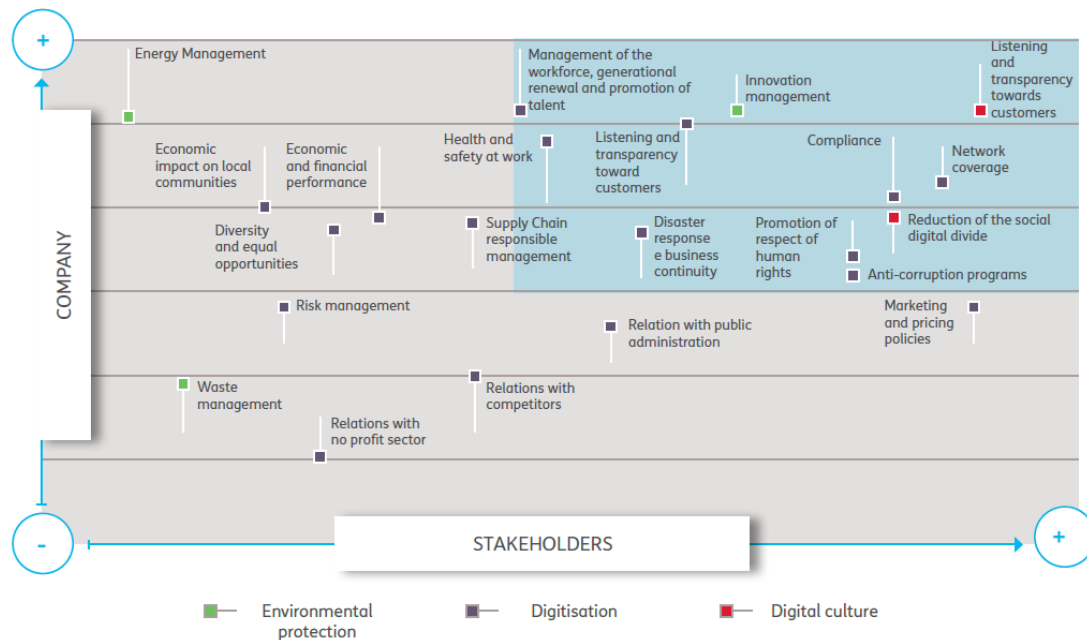
positivistic conviction that reality can be unproblematically represented (Busco and Quattrone, 2018). They point to the value of beginning with “acknowledging accounting incompleteness, lack and partiality” (P.17) and explores how such incompleteness, partiality as well as the visual power of inscription can engender active effects. Within this stream of literature, Jordan and Messner (2012) begin with an acknowledgement that, indicators are always an incomplete representation of performance and go on to suggest that the transparency in these indicators allows organisational members to identify such incompleteness and further invite them to question the reporting system. Quattrone (2009) highlights the visual power of graphics in terms of engaging readers. This is complemented by Jordan Mitterhofer and Jørgensen (2018), who find that the figurative meaning of matrices is highly responsible for managing readers’ perceptions, as it relates elusive specialised discourse to generally understandable discourse.

In light of these articulations, the researcher theorises transparency/disclosure as inscription and thus discern that the incomplete and partial characters, the visual power and the figurative meaning of transparency/disclosure/inscription are where untapped value and potential lie. Specifically, this paper argues that these characters of transparency are liable to entice readers (stakeholders) to question the reporting entity and a dialogic process has potential to be generated in this way. Building upon this logic, the researcher envisages the possibility of mobilising transparency as a means for enabling the dialogic form of accountability.

This study is situated in the context of corporate materiality assessment and particularly the researcher focuses on the potential of the materiality matrix as a format of transparency/inscription to engender dialogic form of accountability. Materiality matrix emerged as a practice by some leading-edge reporters such as BP, BT and Ford in the early 2000s and has become more and more adopted since the announcement of the GRI G3 (2006) and G4 guidelines (2013) (Eccles and Krzus, 2015). GRI G4 guidelines (2013, p.37) recommend that organisations prepare a materiality matrix that places “Influences on stakeholder assessments and decisions” on one axis and “Significance of economic, environmental and social impacts” on the other. In practice the matrix has gradually been developed by companies into two axes, which denote the importance of various issues to

“Company” and “Stakeholders”, respectively (Eccles and Krzus, 2015). As an example, Telecom Italia⁴ (2015, p. 58) presents their materiality matrix as follows:

Graph 4.1 Telecom Italia’s materiality matrix



In this context, the researcher views materiality matrices as graphical inscriptions/transparency and explore how its material features enable dialogue both in the process of its construction and after it is published on the reporting entities’ webpage.

Drawing on fieldwork including 37 interviews in total with sustainability reporting managers (preparers of materiality matrix), corporate senior management and external stakeholders in the UK and Australia and documentary analysis over a period of two years, the researcher finds that corporate materiality matrix as a format of transparency has the potential to engender substantial and effective dialogue both in the process of its fabrication and after it is published on the reporting entity’s website. More importantly, it is found that the material features such as the incompleteness, the visual power and the figurative meaning of the matrix play an important role in enabling the dialogue. On the basis of these findings, this paper makes contributions to at least two streams of literature. First, it substantiates the proposition that it is feasible to mobilise transparency as a

⁴ Telecom Italia is not the case company of this paper. The researcher uses it as an example to familiarise readers with materiality matrix.

means for enabling dialogue. As such, the researcher argues that both forms of accountability can gain strength: dialogue can be enabled whilst transparency finds a positive role it can play within society. Second, the paper sheds more light on the nature of graphical inscriptions. Specifically, it complements Pollock and D’Adderio (2012) and Jordan et al. (2018) by arguing that graphical inscriptions can not only exert a coercive form of control on readers but also can enable readers to question the preparer, especially when the latter is less powerful.

The rest of this paper proceeds as follows: Section 4.2 and 4.3 go into details of the two forms of accountability and the theory of inscription, respectively. Fieldwork and the iterative research process are described in Section 4.4. The researcher presents the field materials in Section 4.5. Finally, Section 4.6 offers a more detailed discussion and closes this study.

4.2 Transparency and dialogue as two forms of accountability in the literature

Accountability is a prevalent but multifaceted concept (Sinclair, 1995). As Roberts and Scapens (1985, p.447) is widely cited, the notion of accountability is in general conceptualised as “the giving and demanding of reasons for conduct”. Within this label, meaningful investigation into accountability is inseparable from the work of John Roberts, which largely relates accountability to dialogue. In addition, thanks to O’Dwyer and Unerman (2008), Roberts (2009), Roberts (2018) and Radcliffe et al. (2017), the nature of transparency as another form of accountability gradually comes to light. The current study concerns the strength of transparency and dialogic forms of accountability, but this will be preceded by a rounded review of them both.

Radcliffe et al. (2017) suggest that transparency as a form of accountability took shape at the turn of the 20th century, when there was an accumulated belief that exposing corporate wrongdoings to the public could engender corporate self-reform and self-correction. Transparency and publicity appear to be more appealing than direct intervention of government as the latter conflicts with the aspiration of economic freedom, the fundamental principle in the United States (Radcliffe et al., 2017). Nowadays, transparency is all the more regarded as a form of accountability and there is a persistent view that making organisations visible and transparent through the publication of accounting reports is to realise accountability (Roberts, 2009).

On the positive side, transparency is indeed able to provide reasons for corporate conduct and thus can be mobilised to cope with corporate internal collusion and build trust with remote stakeholders (Roberts, 2001, 2009). Moreover, Roberts (2009) and Radcliffe et al. (2017) suspect that the faith

in transparency is rooted in the expectation that through being transparent companies will subject themselves to a degree of public scrutiny and result in organisational self-control. Nonetheless, Roberts (2009) emphasises that accountability as transparency becomes counter-productive when people start to pursue its perfection. He quotes Gray (1992, p.415), who contends that:

“The development of accountability...increases the transparency of organisations. That is, it increases (or, in the green vision, should increase) the number of things which are made visible, increases the number of ways in which things are made visible and, in doing so encourages an increasing openness. The ‘inside’ of the organisation becomes more visible, that is, transparent...For the deep green vision, transparency and, thus, the right to information about actions which influence the society, other societies, future societies or the biosphere is not in question. This information must be in the public domain”.

Roberts (2009) counters that it is an illusion to believe that the failure of internal governance can be remedied by the increasing number of sustainability-related disclosures. Radcliffe et al. (2017) evidence this point, by contrasting the increasing number of and more sophisticated financial disclosures in the ‘progressive era’ (1895-1925) with enduring and recurring corporate governance failures during the period. The excessive demand for accountability is argued to be an ethical violence to the accountant, as some actions may be unconsciously or intuitively done (Messner, 2009). Messner also argues that different stakeholder groups should have divergent demands for accountability, in which situation expecting reporting entities to live up to multiple standards at the same time is not morally justifiable. The researcher believes that this critique is applicable to the transparency form of accountability, though Messner’s (2009) contention revolves around the notion of accountability in general.

What is worse, the demand for complete transparency undermines trust and may create an atmosphere of suspicion. Citing Power (1997), Roberts (2009) questions that over-trusting transparency is likely to motivate companies to engage in managing the appearance whilst leaving their internal operations unchanged. Transparency is also likely to transform the behaviour of those whom it aims to make visible. People, who are held accountable and are judged against idealised performance indicators, will blame themselves for being less ideal and may try to shift this sense of guilt by blaming others (Roberts, 2009). This argument has empathy with Roberts (1991), which argues that accounting systems abstract organisational members into performance indicators. Rewards and sanctions accompanying these indicators impose a disciplining effect on people within the organisation, who will see the self as an instrument to realise organisational goals and see others as competitors. Roberts (2009, p.967) names this as “the individualising effects of

transparency”. To weaken these effects, Roberts (2009, p.966) suggests that transparency serve as a supplement to an intelligent form of accountability:

“Accountability, in its intelligent form, is in a particular context. It is not a mere showing or making visible of the self against a pre-determined set of categories, but rather involves active enquiry – listening, asking questions, and talking – through which the relevance or accuracy of indicators can be understood in context”.

The quote introduces the second form of accountability, namely accountability as dialogue, that the researcher intends to unpack in the study. Dialogue as a form of accountability can be traced back to John Roberts’ early work. Specifically, Roberts (1991) argues that as accountability is an inclusive concept, it should include various informal talking between organisational members during lunch or tea time. Such face-to-face contact can help build trust, ties and friendship as well as humanise work. The virtue of dialogic form of accountability is further emphasised:

“Rather than treating others narcissistically as a mere mirror for self, or instrumentally merely as means or obstacles to my private projects, unrestrained talk draws me into relation with others. In this process I am drawn to a recognition of other as other beyond my instrumental interest in them – as a fellow subject”. (p.363)

Roberts (2001) reiterates that verbal dialogue is able to deepen the sense of interdependence between the self and others and thus reciprocal obligation will be felt. More importantly, he adds that dialogue with stakeholders can result in a wider social and environmental concern, which in turn constrains the pure and instrumental pursuit of profit (Roberts, 1996). Afterwards, Roberts (2003) discerns that stakeholder dialogue only happens at the corporate level and that only those who can potentially threaten the company’s reputation are allowed to participate in the conversation. Based on this concern, Roberts (2003) puts forward an “extra-corporeal accountability”, which suggests the company engage in face-to-face dialogue with those who are most vulnerable to the effects of the company’s operations. Such dialogue can make companies aware of their responsibility for vulnerable groups that are being affected by their operations (Roberts, 2003).

Beneficial as the dialogic form of accountability is, it is built upon two idealistic assumptions: “a relative absence of asymmetries of power, and a context for the face-to-face negotiation” (Roberts, 1991, p.362). As such, Roberts himself recognises that the proposal for the possibility of accountability as face-to-face dialogue is “too psychologised” (p.366).

Roberts' idea of viewing accountability as dialogue resonates with Unerman and Bennett (2004), who argue that companies can discharge duties of accountability through consulting with a wide range of stakeholders. With reference to Habermas' Ideal Speech Situation, they suggest that stakeholder dialogue should allow "all stakeholders (irrespective of economic power) an equal opportunity to participate in a debate" and "ensure the voices of all stakeholders were taken into consideration" (p.688). For Unerman and Bennett (2004), however, dialogue is not confined to face-to-face contact. They argue that facilitated by web forum, companies can reach broad and remote stakeholders and thus make more marginalised voices heard.

In this way, dialogue is no longer limited to face-to-face contact. Nonetheless, it is repeatedly argued that dialogue is highly subject to power differentials within the hierarchised modern organisations (Roberts, 1996). Senior management can hold their subordinates accountable rather than reciprocally (Roberts and Scapens, 1985). The dialogue that runs counter to the will of people in power is likely to be closed (Cooper and Owen, 2007). We have learned various virtues of accountability as dialogue, but fail to find out how such dialogue can transcend power differentials and take place regularly within organisations or between the reporting entity and its stakeholders, as Quoting George Bernard Shaw's saying goes, "the biggest single problem in communication is the illusion that it has taken place".

On the basis of the aforementioned literature review, the researcher finds that the dialogic form of accountability is valuable but less likely to happen whereas accountability as transparency especially the pursuit of complete transparency is problematic but widely embraced. This paper argues that both forms of accountability can gain strength if we link them together by mobilising transparency as a means for enabling dialogic form of accountability. The benefits of this proposition lie in that, dialogue, which is less likely to happen can be enabled whilst transparency once treated as a means the problems caused by the pursuit of complete transparency can be avoided. As is indicated in the introduction, this paper focuses on the matrix format of transparency and now move on to review ANT, which offers an explanation as to how and why the matrix can enable dialogue.

4.3 Theorise matrix format of transparency as inscription

Actor–Network Theory contends that non-human actors are as important as human actors in the analytical process (Latour, 1987, 2005; Law, 1994). Latour (1987) particularly talks of the notion

of inscriptions, which are durable materials that translate an event or a situation (see, Latour, 1987, p.215-p.237). Inscriptions can generate larger scale effects, because they are more durable and can travel far (Latour, 1987; Law, 1994). In the accounting literature, inscriptions refer to “the material and graphical representations that constitute the accounting report: writing, numbers, lists, tables” (Robson, 1992, p.685). Robson’s (1992) seminal work points out that accounting inscriptions are subject to a process of simplification, translation and de-contextualisation and thus the positivistic conviction that accounting disclosures can unproblematically represent organisational reality is problematised. The point is reinforced by Chua (1995, p.138), who argues that accounting inscriptions can at best work as “flawed approximations”.

Qu and Cooper (2011) extend the critique on the representational ability of numbers to graphics. They note that information communicated by graphical inscriptions is ambiguous, especially to those who are not involved in the inscription building process. What is more, they find that graphical inscriptions fail to convince and enrol remote and absent users and attribute the failure to the lack of human support. It is detailed that (p.358) “without opportunities for face-to-face interaction among participants to reinforce their meaning, visual inscriptions seem to be less potent. Face-to-face contact through meaning-giving activities can provide the required authoritative support and makes visual inscriptions more effective. Graphical inscriptions have limited usefulness in the absence of ‘human support’.”

Recent years have witnessed an emergence of another stream of ANT-informed accounting studies, which suggest not critiquing the representational ability of inscriptions but beginning with an acknowledgement that accounting inscriptions are incomplete and partial and on this basis, they go on to unpack how such incompleteness as well as the visual power of inscriptions can engender active effects (Busco and Quattrone, 2018). Jordan and Messner (2012) find that the incompleteness of inscriptions can generate effects by enticing subordinate managers to question their senior management. They elaborate that performance indicators (inscriptions) are not perceived as a problem as long as subordinate managers are allowed to mobilise them flexibly in practice. Yet, these inscriptions’ representational quality becomes a concern when they are employed by top management as a performance evaluation tool. More relevant to this study is the argument that it is the transparency in these indicators that allows subordinate managers to identify such incompleteness and further entices them to question the senior management.

Pollock and D'Adderio (2012) focus on the visual and aesthetic power of graphical inscriptions. Their study unfolds in the context of a powerful industry analyst firm Gartner, which uses matrix to rank the performance of IT companies. They find that matrix with too many dots is perceived by analysts (preparers in their case) as bewildering and thus less readable whereas with too few dots appears to be empty and pointless. If there are too many or too few candidate companies, which means there will be too many or too few dots, analysts tend to reset selection criteria in a bid to keep the number of the candidate companies to 10 to 25 dots, as in the way the matrix looks beautiful. On this basis, they argue that matrix has potential to shape the behaviours of their preparers and even has potential to shape the market.

Quattrone (2009) suggests that the visual power of graphical inscriptions is more potent as it can not only shape the perceptions of their preparers but also has potential to engage readers. He argues that graphics is more pictorial and thus appealing to various readers. Jordan et al. (2018) add that the power of matrices also lies in their symbolic and figurative meanings, which engages various readers through evoking their imaginations and relating specialised discourse to everyday discourse. They provide an example of a matrix that is partitioned into three areas and is coloured in red, yellow and green, respectively. The red, yellow and green areas denote high, medium and low risk. The level of risk can be imagined by lay people as red, yellow and green are commonly used on traffic light to denote “stop”, “caution” and “go”.

In addition to the material features of the matrix that have been discussed in prior literature, the researcher inductively derives another character from the field, that is matrix is more agonistic than other reporting formats such as list and table. By agonism, the researcher means that the matrix is incapable of showing that two issues are equally important, which will entice people especially those who are concerned about the issues that are placed on bottom left corner of the matrix to question the preparer.

Inspired by these theoretical articulations, the researcher views the matrix format of transparency as a graphical inscription and from this angle envisages that the incompleteness (Jordan and Messner, 2012), the visual power (Quattrone, 2009), the figurative meaning (Jordan et al., 2018) and the agonistic feature of the matrix have the potential to invite readers (stakeholders) to question the reporting entity and thus can enable the dialogic form of accountability. Building upon this

logic, the researcher posits the possibility of mobilising transparency as a means for enabling the dialogic form of accountability.

4.4 Description of the field and an iterative research approach

This paper is informed by a two-year fieldwork. During fieldwork, the researcher undertook 37 interviews with preparers of materiality matrices (sustainability reporting managers), subject matter experts and senior management across 10 FTSE 350 companies and four ASX 200 companies as well as a variety of external participants such as a representative of investors, sustainability analysts and NGO members, who were involved in corporate materiality assessment. The role of interviewees and timings of each interview are outlined as follows:

Table 4.2: outline of interview details

	Date	Role of interviewee	Timings/minutes
1	02/2016	Water expert	49
2	02/2016	A member of NGO A	41
3	03/2016	A member of NGO A	54
4	04/2016	Sustainability reporting manager	56
5	04/2016	Head of sustainability	50
6	05/2016	Sustainability reporting manager	30
7	05/2016	Sustainability reporting manager	46
8	05/2016	Director of sustainability	50
9	06/2016	Head of sustainability	80
10	06/2016	Sustainability reporting manager	52
11	06/2016	Sustainability advisor	28
12	06/2016	Director of sustainability	58
13	06/2016	Sustainability reporting manager	67
14	06/2016	Sustainability reporting manager	48
15	06/2016	Sustainability analyst	37
16	06/2016	Sustainability reporting manager	66
17	07/2016	Head of sustainability	40
18	07/2016	Senior manager at an accounting firm	37
19	07/2016	Specialist community	24
20	07/2016	Sustainability reporting manager	81
21	09/2016	Sustainability reporting manager	44
22	10/2016	Director of reporting	33
23	11/2016	Water expert	25
24	11/2016	Head of sustainability	29
25	11/2016	Sustainability reporting manager	32
26	11/2016	Sustainability strategy manager	47
27	11/2016	A member of NGO A	25
28	11/2016	A member of NGO B	47
29	12/2016	Sustainability reporting manager	34
30	01/2017	Water expert	52
31	02/2017	Reporting manager	25
32	03/2017	Head of water	37

33	10/2017	Director of sustainability	38
34	10/2017	Head of reporting	39
35	02/2018	Sustainability reporting manager	42
36	03/2018	Sustainability reporting manager	30
37	06/2018	A representative of investors	30

The research access was initially attempted by sending an interview invitation email to the sustainability department of these case companies, but most of the interview requests were declined. The researcher then turned to LinkedIn and attempted to contact potential interviewees through LinkedIn InMail. As such, access to approximately three quarters of these interviews were successfully negotiated through LinkedIn whilst the rest was accepted via email correspondence. In addition to interviews, the researcher was allowed by three case companies to access some of their internal documents related to materiality assessment, which include stakeholder survey, meeting minutes, email correspondence and risk register. These internal documents are analysed together with their sustainability reports and on-line disclosures.

This study is informed by an iterative research process, in which data and theories are constantly compared (Suddaby, 2006). This process begins with an interest in corporate materiality assessment. In the first several interviews, questions were designed to be very open with a view to understanding the context of materiality. The researcher, consistent with Ezzamel et al. (2012), did not attempt to code transcripts until these exploratory interviews were completed. From these interviews, the researcher identified that interviewees' concerns revolved around various forms of dialogue with stakeholders. This inspired the researcher to expect that the data collected may have potential to complement stakeholder accountability literature. After this, the researcher moved back and forth between follow-up interviews and theories that underpin stakeholder accountability literature. After a long-term discussion, the researcher reached a consensus with supervisors and discerned that the notion of inscription offers a plausible explanation of the data. The theorised data are displayed in the following section.

4.5 Field materials—context of materiality matrix

This study together with several influential papers (Boiral, 2013; Etzion and Ferraro, 2010; Edgley, Jones and Atkins, 2015) related to transparency and sustainability reporting is highly relevant to the role played by the GRI. GRI was founded in 1997 as a non-profit organisation and since then has developed a series of sustainability reporting guidelines, which arguably set de facto standards for transparency in corporate economic, social and environmental performance (Etzion and Ferraro,

2010). As per the description in the introduction, since the release of the GRI G3 (2006) and G4 guidelines (2013), which recommend that organisations prepare a materiality matrix that places “Influences on stakeholder assessments and decisions” on one axis and “Significance of economic, environmental and social impacts on the other”, materiality matrix has become a prevalent format of transparency. What is more, the G4 guidelines require companies to consult with their stakeholders in the process of constructing the matrix. An experienced sustainability reporting manager, who was involved in compiling GRI G4 guideline strongly emphasised that the value of materiality matrix lies in its dialogic process:

“I think people get very blindsided by the materiality graph that is an output of the materiality process. Many organisations include the materiality matrix in their reports without an explanation of its true meaning. The change in the matrix to include a focus on organisational impact requires more internal discussion on how this is defined. Organisations should be less focused on the graph, and focus more on getting to that and understanding what’s material, what value do we create by undertaking a materiality process. By talking to our stakeholders, listening to what they have to say and responding to them in our reporting we create longer lasting relationship with our stakeholders.” (Interviewee 18)

That said, it is worth noting that it is sustainability reporting managers who prepare materiality matrix at corporate level. While the GRI has great influence in the field of sustainability reporting, within companies it is primarily influential to sustainability reporting managers, who are at relatively lower organisational levels. While reporting managers actively follow the G3 and G4 guidelines and endeavour to consult with their stakeholders, this cannot ensure that their stakeholders or stakeholders’ representatives (internal colleagues in other departments) will cooperate and participate in the dialogue. In this situation, the enablement of dialogue requires a trigger, which can mobilise other interlocutors’ interests and the researcher argues matrix can play such a role. In what follows, the researcher will unpack the potential of the matrix as inscriptions to enable the dialogic form of accountability in the process of its fabrication and after it is put into use.

4.5.1 Matrix’s potential to enable dialogue in the process of its construction

It has been mentioned that materiality assessment at corporate level is managed by the sustainability function and correspondingly sustainability reporting managers are responsible for preparing materiality matrix. For most of the interviewed reporting managers, materiality matrix is not taken as an imposition of the GRI but as an opportunity to create a long-term “vision” for their companies. The vision is more inclusive, as the relative importance of each issue embodied

by the spatial distance between dots on the materiality matrix is co-produced by organisational members across functional boundaries as well as by a wide range of external stakeholders. The method of reaching stakeholders varies across the case companies, ranging from face-to-face contact such as meetings, workshops and interviews to conversation at a distance through emails and surveys. In several cases, corporate sustainability departments employ consultancies to facilitate their dialogue with stakeholders. Regardless of the difference in methods, the nature of co-production will inevitably generate dialogue among participants.

It is common to see in the field that the materiality process begins with a preliminary matrix, constructed by sustainability reporting managers in the light of available information such as the media coverage and the ranking of each issue on the internal risk register. This is followed by a stage of consultation with internal and external stakeholders with a view to testing the validity of the ranking on their self-constructed matrix. In the meanwhile, the matrix is employed by some interviewees as a “stimulus” to dialogue. A Global Reporting Director talked of this point:

“We end up with a kind of provisional matrix essentially so all that’s desk-based... We use that as a discussion basis for a group of internal stakeholders from across the business and different functions including supply chain, R&D, custom development, finance, investor relations, communications... If you’re just talking about issues without any additional stimulus, it’s quite hard to get a sense of the relative importance. When people **see** a matrix, they can quite clearly **see** that some issues are more important than others... It does bring to life the discussions in a way that a table, or just another form of presentation which maybe isn’t as **visual**, doesn’t. People often say a picture tells a thousand words and that is very much the case with the materiality matrix, it really does **generate quite a bit of discussion** and debate. It also highlights many more nuances that you wouldn’t be able to get across in a simple listing of issues according to most to least material, because you wouldn’t get **a sense of** the kind of **gap** between them, the relative weighting of importance to business versus importance to stakeholders and so on”. (Interviewee 34)

From the highlighted words and sentences such as ‘see’, ‘visual’ and ‘generate quite a bit of discussion’, we can clearly discern that the visual power of the matrix (Quattrone, 2009) was producing a prompting effect on dialogue between participants. As the difference of each issue is visualised through the ‘gap’ between the dots on the coordinate system, their relative importance can be intuitively understood by non-experts in other departments (Jordan et al., 2018). It is this rough understanding and imagination that render the discussion across divisional boundaries possible. The researcher argues that most of the dialogue enabled by the matrix is inseparable from its visual power. The quote below may provide corroborating evidence on this point:

“It was just how it’s colour-coded, when you have social and environmental; and it was one colour before, and now they said let’s spread it between green and orange. Because it

said, ‘social and environmental,’ and before I only had ‘social’ on it. It was only in orange, which indicates social, so they just wanted to be more specific, because the financing covers both; it covers social and environmental financing. And the same entrepreneurial support covers both, because the entrepreneurs, they create jobs; at the same time, a lot of what they do is to extract the environmental resources and come up with solutions to a low-carbon economy, so it’s a combination of the two as well... **They’re small things; there were not major comments but it offers an opportunity for dialogue.** And also I think what it does in some ways, maybe indirectly, is that it is a way of finding out what people think (and) to use it to see what else we can do as a sustainability function. How else can we engage with colleagues, if we identify areas that they don’t know anything about it, or they might mention, ‘Oh, yes, it would be good to find out more about this, or what are we doing in this area and why it is important.’ So maybe then we can use this as also way of finding out how can we improve our communication: what else can we do to inform people”. (Interviewee 36)

Jordan et al. (2018) suggest that if colours are introduced to the dots, the matrix will become more visible and recognisable. In this regard, the lengthy quote shows that in the process of circulating the matrix, some departmental members’ attention was captured by the colours of the dots and a dialogue was triggered in this way. Of greater relevance to this paper is the highlighted sentence, which suggests that transparency (matrix) is mobilised as a means for enabling “an opportunity for dialogue”.

While the aforementioned two quotes flesh out the visual nature of the matrix, in other situations it works concurrently with other material features such as incompleteness and agonism in terms of enabling dialogue. The matrix format of transparency is more agonistic, because it is inevitable that on the matrix one issue will be displayed as more important than another. Simultaneously, the matrix fails to provide an account as to why some issues are more important than others, as it is incomplete. The agonistic and incomplete features are liable to entice other organisational members, especially those who are responsible for the issues that are ranked as less material on the matrix to question the reporting manager. A head of sustainability reporting recalled how she was questioned by their procurement team:

“Some years we had it (matrix) in quadrants; divided into four, and then it looks like all the ones on the top right are very material, and the ones on the bottom left are not material. Well actually you chose those issues because you knew they were important, when you choose your field of issues you know all of them are important to some extent. Some people got very upset because of this something like responsible sourcing was in the bottom left, it looked like it wasn’t important. I think our procurement team. They didn’t agree with that. The sentiment was: ‘We don’t really understand this materiality analysis. We don’t understand why you do it like this, because for us it seems intuitively wrong’.” (Interviewee 13)

The researcher argues that this active questioning process has the potential to be the ‘intelligent accountability’, which is advocated in Roberts (2009). Given that the head of sustainability and her colleague in the procurement team belong to parallel departments rather than being subordinate to one another, they are more willing to share their true feelings and challenge the view of others, as is embodied in the last four lines of the quote above. In a similar vein, a reporting manager was questioned by their senior management as to why ‘transparency’ was placed at the bottom left corner of the matrix. It is elaborated:

“One question we had, because as you can see, it has four quadrants, and one of the comments was, for example, if we look on the top quadrant on the right-hand side, we have financial performance, conduct and compliance. The question was: ‘Is transparency (located at bottom left corner) less important than financial performance?’ In our view that wasn’t the intention. They were saying, ‘Is it?’ or was it our intention to say that it is less important; and I said no. But any engagement that we can have I’m happy with, because that means people are thinking, and people are looking at it seriously. To me that’s the most important thing. I would like to think that it helps in some way to raise awareness of the sustainability issues across the business”. (Interviewee 36)

This example further reinforces the argument that the combination of the agonistic and incomplete features of materiality matrix has potential to enable a questioning process. Nonetheless, it is worth noting that reporting managers’ attitude towards these invited dialogue is divergent. Most quotes above reveal reporting managers’ apparent willingness to mobilise the enacted dialogic opportunity to spread the awareness of sustainability across their business. Nevertheless, the researcher also elicited a reluctant voice from the field, who argued that “it is not a positive dialogue, because somebody is criticising you. There are other ways to create dialogue with them”.

What is more, it is suggested that symbols on the matrix may carry a metaphoric meaning, which can help readers make sense of the matrix (Jordan et al., 2018). In the context of this paper, the name “materiality” attached to the matrix connotes the meaning of materiality in financial terms, i.e. 5% of EBIT (earnings before interest and tax), which is well established and resonates within the business. As such, internal colleagues are likely to make sense of the materiality matrix by imagining the concept of financial materiality and more importantly they may become interested in debating with the preparer of the matrix when it is found that the meaning conveyed by the materiality matrix is significantly different from their understanding of materiality in financial terms. A reporting manager touched upon this point:

“The first time we presented it (Matrix), there was a lot of confusion. Like what is this? Because from a financial perspective this is not materiality. Materiality is a defined

accounting term. That's not the approach we're taking, so **the first time we circulated it (matrix) there was a lot more debate, but when people understood the perspective it comes from, and we make it very clear, this is a GRI materiality assessment process then I think people got more comfortable.** Then that has made a big difference because over the last 18 months there's been a lot more discussion about non-financial rules and policy. One of our lawyers for example is now a GRI expert and this isn't a sustainability lawyer. This is group corporate council but he's sitting there going to us, 'How do you know that we've met these (sustainability reporting) requirements?'...I would expect them to look at my materiality matrix, understand my disclosure and then to influence the way they think about the prospects of the company". (Interviewee 35)

The figurative meaning of the matrix creates a tension and engages objectors into dialogue with the reporting manager. The dialogue further allows the meaning of materiality to be understood in context (Roberts, 2009). While as with the literature (Cooper and Owen, 2007), the majority of the interviews do not support the direct link between the result of materiality assessment and high-level corporate decision-making, this quote especially the change of the lawyer's mindset suggests that dialogue can make a difference, albeit in an uncertain way and over an extended period of time. Up to this point, the researcher has analysed materiality matrices' potential to enable horizontal communication between sustainability reporting managers and their colleagues through enticing the latter to question the former.

Intriguingly, the researcher concurs with Pollock and D'Adderio (2012) and observes that the material features of the matrix will likewise impact upon its preparers. It is the reporting managers' different extent of concern for the incompleteness and partiality of the matrix that makes them part company with each other on the need for further consulting external stakeholders. A small group of interviewees forthrightly expressed their aversion to involving an excessive number of external stakeholders into the materiality assessment:

"We are a beverage company we operate in emerging markets, where water is scarce and you know intuitively we just understand it's an important part of our impact we have in our external (water) risk and supply chain, so we don't really need materiality analysis in too much depth...I don't think we need to go to hundreds and hundreds of stakeholders to try and build up a bigger and bigger picture of what materiality is. There's no point spending lots of time and effort and huge amounts of resources doing a massive and expensive materiality analysis again and again just for it to tell you what you already knew". (Interviewee 23)

The researcher elicited the quote from a head of water at a beverage company, who participated in their company's materiality assessment. As a subject matter expert, his confidence in the ability to represent water-related issues facing the company and their stakeholders is apparent. The paucity

of concern for impartial representation of the matrix allows him to oppose excessive stakeholder consultation. A head of sustainability echoed the similar view:

“I think what we didn’t want to do is to have an overblown process to achieve it (materiality matrix) ...sometimes absolute democracy does not actually move. And so I think it's this whole piece around executive power and democracy piece how all that works together is interesting”. (Interviewee 9)

It is worth noting that the foregoing two quotes do not represent the mainstream voice in the field. After dialogue with internal colleagues, the concern for incomplete and partial representation of the matrix is still persistent among most of the interviewed reporting managers. Bringing in an external view is seen as an imperative if such partiality is to be complemented. To this end, some interviewees elect to involve a consultancy. A Global Sustainable Development Director talked of this point:

“We employed an external agency to do that work. So this in a way that allowed us to sort of use their judgment to help inform that materiality rating rather than perhaps apply only a Name of the company judgment which might have been very biased within it...so it’s not Name of the company alone doing that work it’s got very broad external parameters and the fact that it’s often done by an external party adds a degree of **impartiality** to that positioning”.

“The value of having an external agency to do that work is it **removes the potential of unintended bias** if you only did it yourself; and that unintended bias would be ‘okay, well we think that human rights is the most important thing that we should’ because the person who is doing the study has, for whatever reason, got a personal interest in human rights and therefore not only, just in the way it is written, but even the way that the questions are asked; the order of the questions; the working of the questions can create an unconscious bias towards creating an answer that says human rights is the most important thing”. (Interviewee 8)

The word ‘impartiality’ and ‘removing bias’ were pervasively used when interviewees talked of the value of involving a consulting firm into their materiality assessment, which supports the argument that it is the concern for the impartiality of the matrix that enables reporting managers to talk with external stakeholders. When it comes to the consultancy’s contribution to dialogue, the director provided an example:

“If there’s a farmer supplying to our company and he goes, he sells to Name of his company, and I go to him as person who is wearing a *Name of his company* tee shirt and say: ‘hello Mr Farmer are Name of his company a good customer?’ What’s he likely to say? He’s likely to say ‘yes’ because I’m buying a lot of his stuff and he wants to keep that business. Whereas if I go anonymously he may tell me a different story and so if you do the research through a consultancy you have the ability to ask them questions from a more anonymous source and then you may get a different view”. (Interviewee 8)

The interpretation of the quote is debatable. Literally, it can be understood that by engaging an external agency to perform dialogue, the director removes the potential power differentials between the company and their vulnerable stakeholders (Roberts, 2003), as in the face of a consultancy Mr. farmer in question is able to speak freely with little fear of losing future purchasing contract (Unerman and Bennett, 2004). A more critical interpretation of the quote, however, could be that Mr. farmer is hypothetical and that the external agency is introduced, because the case company is reluctant to speak with their stakeholders. Hence, the researcher is uncertain as to whether consulting firms can effectively mediate dialogue between companies and their vulnerable stakeholders. Nevertheless, notwithstanding these uncertainties, consulting firms at least can provide an external view in its own right to evaluate the appropriateness of the ranking on the self-constructed matrix. Relevant comments are listed as follows:

“They (consultancy) come up with new thoughts to help us inform our judgements so you know, there’s a bit of a two-way dialogue really. I can give you a couple of examples so one was around – on the business case axis so the sort of the impact of the business axis, should we apply equal weighting to growth, cost, risk and trust? We had quite a long debate (with the commissioned consulting firm) about whether or not we should put more emphasis on one or more of those and you know, maybe sort of assign a 40% weighting to one of them and a lower weightings to the others and a similar conversation about which stakeholders are most important and whether or not we should weight those so that’s the kind of thing that they kind of provide some intellectual challenge to us...Part of the reason for doing that is to provide **impartiality** so that we keep our judgements, well we ensure that our judgements are kind of not being biased by you know internal sort of requirements. (Interviewee 34)

The word ‘impartiality’ was used again, which provides corroborating evidence that the concern for the partial and biased representation of the internally constructed matrix engages reporting manager themselves into a dialogue with an external party. Some other companies, however elect to bypass the third party and directly discuss with their stakeholders about the ranking of the matrix.

It is argued that:

“We did a lot of work talking to stakeholders. We had a couple of roundtables, we had client interviews and discussion groups...So things we thought were really high important, our stakeholders almost thought were a given, it’s not really material issue because that is almost business as usual...Like ethical business, we map it really high, some of the investors would actually put them down in the priority list of where we need to focus on our attention quite low, because it was a hygiene factor. It’s given. It’s important but it is not important for you to focus on, because you should already got this in the bag. And that was quite **an interesting kind of learning** from that I guess. So we had quite a lot of conversations and interviews and questionnaires and those sort of things and analyse results and the matrix on the report is kind of where they landed”. (Interviewee 12)

The debate with investors on the relative importance of each issue is experienced by the reporting manager as “an interesting kind of learning” rather than as coercive, perhaps because the ranking on the matrix is mobilised as a means to delineate the vision of the company in a loose sense rather than treated as an end for evaluating performance (Jordan and Messner, 2012). Under this condition, reciprocal understanding and trust are more liable to be felt and built (Roberts, 1991).

While work-in-progress materiality matrix provides a platform for the reporting entity to interact with their stakeholders, the data suggests relative to local people it is global stakeholders such as investors, NGOs and academics who are more likely to be invited. A reporting manager candidly revealed that:

“We don’t pretend that we’ve got every single input from every single stakeholder at all our sites but what we do is a global materiality analysis. There might be ones that go on locally in the market when they’re doing their risk assessments at different sites and projects. They’ll do a risk assessment and a materiality analysis around that at site level, at market level and country level”. (Interviewee 30)

The exception to this is a reporting manager, who organised two materiality stakeholder workshops at the site of their local operations, through which they identify that water shortage is a common challenge facing local communities as well as their company. The exchange between the researcher, sustainability reporting manager and head of their department in a group interview was extracted as follows:

Researcher: I saw that water at these two sites has been identified as a risk on your risk register. What’s the contribution of materiality assessment and the matrix?

Head of sustainability: Materiality (matrix) gives us that **bird’s eye view** of operations and looks external, had we not had all those different **dot points to connect** we would have **seen** Name of the site and Name of the site as separate risks to be managed in and of themselves, but with all of that context we were able to use the knowledge that we had and look across and realise that actually those risks exist, that they are part of the bigger picture.

Sustainability reporting manager: I think where it was a bit of a surprise, where we need to focus long term, is our operations exist within communities and the communities also don’t have water and so, from a risk perspective long term, we need to figure out how we can balance our water needs with community needs and that was a bit of the conversation going back and forth with the directors, was how do we as a company best manage this conflict between our need for water and community need for water? The answer from the chief operating officers was the idea is to be resilient”. (Interview 17)

The X and Y axes of the materiality matrix of the company in question are informed by the numerical rankings in their risk register and local community leaders’ qualitative judgment, respectively. The crucial contribution of the matrix lies in that it places qualitative judgment

especially the voices of those vulnerable stakeholders, which would otherwise be deemed as subjective, emotive and unscientific, on a relatively equal footing with powerful numbers. The visual power concurrently comes into play (Quattrone, 2009), as the matrix offers a “bird’s eye view” and “dot points”, which relate local communities’ water needs to the case company’s water consumption. More importantly, this lengthy quote demonstrates that power differentials among interlocutors may be subtler in practice than what is described in the literature. Roberts and Scapens (1985) argue that senior management can hold subordinate managers accountable to them rather than reciprocally. This is true, but if subordinate managers can speak with even less powerful stakeholders such as local communities, convince them that problems facing them are intrinsically linked and can be relieved by joint forces and enrol them into a network with the company, within the company subordinate managers can amplify their voices by speaking for the network and this network has potential to hold top management accountable. The chief operating officer’s positive response substantiates this point. Relative to Roberts, Sanderson, Barker and Hendry (2006), who find that CEOs would leverage investors’ voices to restructure their company, the researcher argues that dialogue can be more potent as to allow the less powerful reporting managers to hold the powerful to provide an account. This view was echoed by a director of reporting, who argued that their materiality assessment convinced the company of the need for investing more in renewable energy, because this is “recognised across a number of different stakeholder groups as been material”:

“It can be a useful input to strategy and where we put our emphasis. You know by being able to say there’s an issue that is recognised across a number of different stakeholder groups as been material and important, it should be something that is at least under consideration or may feature quite strongly in strategy or in plans or decisions to do something so that’s the type of things that sit in there... We have an investment in society budget in Name of the company, like many companies – we invest 1% of profit before tax in investment in society; so straightaway, you know, things that are material issues, we’d be using that structure what we choose to invest in. So as a top level example of that, you know, we took a decision a couple of years ago to go 100% renewable from an energy point of view, so you know, it might mean that it’s not the cheapest, if you looked at it from a purely financial and economic point of view, but that’s an example of how capital investment is driven by, you know, materiality and the strategy, and the approach that we take”. (Interviewee 22)

The analysis undertaken thus far suggests that the visual power, the incomplete and agonistic characters and the figurative meaning of the materiality matrix constantly enable internal dialogue across divisional boundaries along the trajectory of its circulation. The concern for the partial representation of the matrix also drives reporting managers to engage in dialogue with a

consultancy or external stakeholders. It is widely recognised within the interviewees that materiality assessment and the matrix are successful in terms of engendering internal dialogue. When it comes to engaging external stakeholders, the effect of materiality matrix is debatable, especially given in most cases only global stakeholders are invited to participate in the matrix construction process. The doubts about the inclusivity of the matrix were expressed by some sustainability analysts interviewed:

“In a printed report the matrix is mostly used to represent to their stakeholders that there has been some prioritisation of issues undertaken by the company. The issue is that the assessment on the matrix for stakeholders is often a proxy view of what stakeholders want or a small representative view and therefore it is possible to alienate broader stakeholders who were not consulted by including a matrix where the issues do not represent their views”. (Interviewee 18)

“In some cases some companies will take this approach (materiality) they identify the risks in house, so within their own offices and their own companies without actually speaking to the stakeholders...often they did a desk top analysis, in a sense, and identified any risks, and then decided in house what the solutions to those risks might be...The decisions are probably predominantly made in house. It depends on the company, but I would say from my research it's predominantly less inclusive”. (Interviewee 15)

These doubts are reasonable, but overlook the fact that after the matrix is completed and published on the reporting entity's webpage, its visual power, the incomplete character and the figurative meaning can still perform and engage readers/stakeholders. This will be discussed in the following section.

4.5.2 The published materiality matrix's potential to invite dialogue

This section goes on to tell that the published materiality matrix as a format of transparency has further potential to enable dialogic form of accountability. We have learned that matrix is an agonistic format of reporting, as it is incapable of displaying parallel relationships. On the matrix, every issue will be assigned a different level of importance, which will entice external stakeholders who are concerned about the issues that are ranked as less material to question the reporting entity. In this regard a reporting manager noted that:

“The problem with some of the things on the matrix is that it goes back to our rights-based conversation, the social aspects conversation. They're very emotive issues... because education skills or executive pay or socio-economic inequality are very emotive issues, stakeholders who see those as particularly important might well say to you: 'Well it's on the left-hand side, they're going to ignore it'. Well no, we're not going to ignore it, but we're not going to do everything at the same level”. (Interviewee 33)

Speaking in a helpless tone, the narrator of the quote seems to be suggesting that he has been constantly forced by the agonistic feature of the matrix to provide additional explanation as to the ranking on the matrix. Likewise, the figurative meaning of materiality continues to perform after the matrix is published. Given that not only companies but also a wide range of external parties such as NGOs and analysts will undertake their own materiality assessment, in practice definitions of materiality are multiple or even divergent. Such divergent understandings of materiality resulting from these assessments have the potential to trigger a dialogue between the reporting entity and an external party. An NGO member revealed an example:

“Companies can undertake a materiality assessment when identifying what, let’s say the impacts or risks that are facing their business. For example, Name of the company, which is a big oil and gas company, has previously reported to Name of the NGO’s water, has always responded to our water questionnaire. Last year in 2015, they decided not to respond, and when we asked them why they weren’t going to respond, they pushed back and said, or the response was, we’ve undertaken a materiality assessment and we no longer deem water to be material to our business. We think carbon and fossil fuels is more material, so therefore we’re going to focus on that. Companies undertake materiality assessments to identify those topics or themes or issues or risks that are going to be most material to their business, and then that tends to view what they focus on. We obviously feel that water is material to a company like Name of the company and we have our own very robust methodology that details how we target companies based on first sector, then sub-industry, then business activities, which we deem to be greatly impacted by water resources. From business, they do a materiality assessment and they decide what are the principles outlining that and then from our side we have a methodology where we identify the sectors that we think water is material to them”. (Interviewee 2)

The interpretation of the quote is complex. On the one hand, it can be argued that the dialogue here is ineffective, as materiality is leveraged by the reporting entity as a shield from more accountability/transparency. On the other hand, a more sympathetic interpretation can be that companies are suffering from ‘ethical violence’ (Messner, 2009), as a water expert within the company commented on the NGO’s questionnaire:

“Name of the NGO asks too much data. I don’t know why they need so much data. We can’t see too much value. Name of the NGO said they are on behalf of investors, but I don’t think investors use such detailed data”. (Interviewee 1)

The researcher is not able to reconcile the tension between the reporting entity and the NGO, but Messner (2009) warns that a unilateral emphasis on the demand for accountability is not morally justifiable. From this perspective, the researcher will not view the case company’s resistance to the NGO’s questionnaire simply as a weakening of accountability, just as the increasing number of disclosures cannot be viewed as a sign of greater accountability (Roberts, 2009). For the

researcher, a more plausible way of assessing accountability is through interrogating the quality rather than the quantity of reporting in written form or dialogic content. Relative to more and more transparency, dialogue/accountability that is able to facilitate action (Cooper and Owen, 2007) is considered more substantial and effective. With regard to the enablement of action, the power of the incompleteness of graphical inscriptions is not negligible. A director of sustainable development talked of this point:

“On things like water scarcity and stewardship because we have factories and businesses in areas of the world that are water stressed. They have more confidence in our business when they see: yes we have prioritised this, it’s in the top right hand corner of the matrix. But they like to ask how we did this process; what it tells us and what it means then in terms of the actions that we take...Investors like to be reassured that you are applying rigorous process because rigorous process reduces risk and investors are not certain about risk. We discuss the positioning of issues on the matrix and whether that aligns to their assessment broadly of the risk and prioritisation of action...Investors appreciate transparency in dialogue about prioritisation and risk planning. It’s basically they value the transparency and they think that’s worthwhile and they are reassured by the fact that we’re working on it”. (Interviewee 8)

The quote suggests that the incompleteness of the matrix not only invites external stakeholders to require the reporting company to be more transparent in their materiality process but also elicit a questioning process (Roberts, 2009) as to whether the company has taken actions to deal with the prioritised issues. For the researcher, this is a sign of moving towards intelligent accountability. The power of the incomplete representation of the matrix is also recognised by other internal and external organisational members. The researcher has delineated at the outset of Section 4.5.1 that materiality matrix is viewed by the interviewees as the vision of their organisation in the long run. Nevertheless, the matrix is an incomplete picture as it fails to show the way to realise the vision. Thus, stakeholders, within reason, will be tempted to query the route to the vision. A director of sustainability reporting recalled that:

“We do know for example that certain analysts, especially rating agencies like DJSI and others, they do look at the materiality matrix and they ask questions about the three most material issues, for example; what targets do you have, what strategy do you link these areas to accepted remuneration; those kinds of things”. (Interviewee 34)

The context here is that DJSI (Dow Jones Sustainability Indices) constructs an index comprising a series of performance indicators and qualitative disclosure requirement to evaluate corporate sustainability performance. In the year 2014 and 2016, DJSI adds whether companies have translated material issues identified into specific targets and whether companies have linked the realisation of these material targets to executive remuneration to its family of indices (Robecosam,

2014; 2016). The researcher argues that DJSI's interest in material targets and the link between material targets and executive remuneration and its dialogue with companies on these matters are somewhat inspired by the incompleteness of corporate materiality matrix. This can be evidenced by the quote above especially by the argument that "they do look at the materiality matrix and they ask questions...". This contention is further reinforced by an argument from an analyst, who are familiar with DJSI's questionnaire construction process:

"I would say the materiality matrix is just the first step, but it should serve as a basis to then define actions. So it's more like a starting point for us, the materiality matrix. So the first step is really defining, having the process to identify these issues and defining these issues. And then, when we have that, we want to see which are the strategies that they build on these issues: so what is the long term trend in strategies to make sure that they address these issues correctly? And then we look at the pattern and the matrix: so what project and matrix do they have to make sure that the strategies they've put into place are achieved? And then finally we also look at how these targets are linked to the compensation of executive management. So we want to see that someone is also accountable for following or for reaching the targets related to the material issues". (Interviewee 37)

That "I would say the materiality matrix is just the first step, but it should serve as a basis to then define actions" further evidences that the enablement of dialogue between DJSI and companies is inseparable from the power of the incompleteness of materiality matrix. The researcher considers the dialogue here as more progressive, as the questioning of the link between material targets and executive compensation has the potential to hold decision-makers to account for their actions. In this regard, the external party and internal sustainability reporting managers are likely to 'collude' with one another, as DJSI's requirement caters to sustainability reporting managers, who are in need of alliance and support. The analyst went on to argue that:

"I can maybe have an example: for instance, some companies will have like environmental, operational eco-efficiency issues, or human rights as material issues. And usually when we talk to people in a corporate sustainability team, or people in environmental team, they are really convinced by that. But often the executive management is not really directly held responsible for that, and then they have issues pushing these material issues forward. And I think this is a work that they do a lot, and they are always asking us for arguments and for good input on how to be able to do so. So with the argument that if the companies score well on the questionnaire then they will be included in more financial products, I think this is always an argument for sustainability people to convince, or to try to convince their executive management... We have different examples. I cannot share any names. But I would say the most convincing example for us is that we have companies where the compensation of the executive management is linked to the performance." (Interviewee 37)

We have learned in the preceding section that dialogue with external stakeholders has the potential to amplify sustainability reporting managers' voices within the company and hold top management

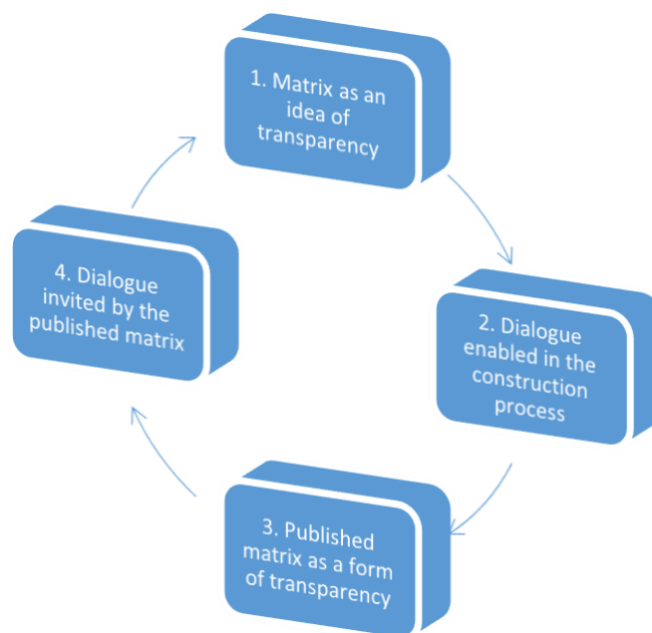
to account for their social and environmental impacts. The voice from the external analyst here provides corroborating evidence on this point.

In this section, the researcher substantiates that even though some reporting organisations' materiality matrix is less inclusive in its construction process, after it is published on the website non-participants still have potential to be invited to talk with the reporting entity. The material characters of the matrix continue to perform in this phase. Before closing the section, it is worthwhile noting that as with the construction stage, it is apparent that it is global stakeholders who are most likely to be invited by the published matrix. Engagement of local stakeholders remains limited.

4.6 Discussion and conclusion

Drawing on the analysis of field materials above, the researcher will construct what can be called an 'accountability wheel' as follows:

Graph 4.3 Accountability Wheel



In Phase 1 the physical matrix has not yet been produced and materiality matrix is an idea of transparency in the virtual space initiated by the GRI. Given GRI's influence and legitimacy in the field of sustainability reporting, more and more companies elect to undertake materiality

assessment and present the result through the matrix format. In the matrix construction process (stage 2), material features of the matrix such as incompleteness, vision, agonism and figurative meaning wield influence through enticing stakeholders (here internal primarily) to question reporting managers. These dialogic exercises will be translated into a physical matrix and published as a format of transparency on the reporting entity's website in Stage 3. The aforementioned material features of the matrix continue to perform in this stage and invite external stakeholders who are not involved in the matrix construction process to question the reporting entity. These conversations constitute Phase 4 and contributes to the come-into-being of the matrix in its next iteration.

The constant translation between transparency and dialogic forms of accountability within the 'accountability wheel' allows the researcher to make contributions to at least two interrelated streams of literature. First, the researcher fleshes out the strength of both transparency and dialogic forms of accountability. On the one hand, the paper finds a positive role that transparency can play, which lies on the continuum between two extremes, that is, positivistic conviction that organisational reality can be unproblematically represented versus constructionists' insistence on its impossibility. Between these two extremes, transparency can be regarded as a partial and incomplete representation and in so doing it can produce positive effects by working as an engine of dialogue. On the other hand, the work of John Roberts has elaborated the value of dialogic form of accountability. Valuable as dialogue is, we know little about how this form of accountability can be realised in practice especially given the power differentials and spatial distance between members at different organisational levels or between the reporting entity and their stakeholders. The researcher has provided evidence that with recourse to the power of material features of the matrix/transparency, dialogue on sustainable development is no longer constrained to the sustainability department, but can be continuously activated along the matrix's circulating trajectory. More importantly, the researcher finds that dialogue with external stakeholders have potential to amplify sustainability reporting managers' voices within the business and hold senior management to account for the social and environmental impacts. Dialogue with stakeholders is attached to ethics in the accountability literature (Roberts, 1991, 1996; Unerman and Bennett, 2004; Cooper and Owen, 2007), but the researcher hopes to complement them by arguing that even from strategic point of view dialogue with stakeholders is indispensable.

Second, the findings further shed light on the nature of graphical inscriptions. Prior to this paper, Pollock and D'Adderio (2012) have investigated the power of matrices. Their study unfolds in the context of a powerful industry analyst firm Gartner, which uses a matrix to rank the performance of IT companies. Some industry analysts are strongly driven by the pursuit of drawing a beautiful matrix and specifically they perceive matrix with 10 to 25 dots as beautiful. If there are too many candidate companies, which means there will be too many dots, analysts will reset selection criteria to cut some companies out. As such, they flesh out the coercive power of graphical inscriptions as the matrix is able to control the behaviours of their preparers and further control the market. It must be noted that such coercive power of the matrix resorts to the almost monopolistic power of the industry analyst firm Gartner. It is described that "whilst Gartner is just one of a number of such research organisations within this area, it is widely recognised as the largest and most influential. Despite not having a monopoly over the production of IT analysis, commentators suggest it has something close" (Pollock and D'Adderio, 2012, p.570). In the context of this paper, however, while the GRI has great influence in the field of sustainability reporting, within companies it is primarily influential to sustainability reporting managers, who are at relatively lower organisational levels. Internal colleagues and external stakeholders are not afraid of challenging the matrix and reporting managers. Instead of framing or controlling the content for discussion, the matrix enables readers to put forward more thorny questions. As such, the researcher argues that graphical inscriptions in the hands of relatively powerless people are more likely to generate enabling effect. These findings can further complement Jordan et al. (2018), who contend that graphical inscriptions are able to manage readers' perceptions at a distance, by arguing that readers' perceptions can only be controlled temporarily, which may be further replaced by an active questioning process.

Contributions notwithstanding, this study is not without limitations. First, while the researcher has demonstrated that materiality matrices as graphical inscriptions have the potential to prompt dialogue about sustainability both within the company and between the reporting entity and its external stakeholders, ANT theorists as well as the author of this study are not proponents of 'material determinism' (Law, 1994). That is to say, the researcher does not believe that materiality matrices/graphical inscriptions alone can totally decide the level of stakeholder accountability. As an example, the researcher does not think that materiality matrices can enable community members who even do not have access to the internet to question the companies that are influencing their

lives. As another example, the researcher equally does not think that materiality matrices can exert a significant influence on stakeholders, who have already been very much concerned about corporate sustainability issues. Greenpeace, for example, is well known for its confrontational attitude towards the corporate sector (Deegan and Blomquist, 2006). The researcher believes that Greenpeace will question their concerned companies, regardless of the existence of materiality matrices or not. Second, while the researcher interviewed several people from other (non-sustainability) departments and external NGO members, the vast majority of the quotes used in this paper come from sustainability reporting managers and the head of sustainability department. It would be ideal if the core argument of this paper can be further validated by more external members, but given the difficulties of negotiating access in the field of sustainability (Hopwood, 2009), this plan fails to materialise eventually.

Finally, the researcher argues that findings of this paper have the potential to be extended by future studies through both empirical and theoretical efforts. Empirically, it is worth interviewing more external stakeholders as well as more senior corporate members such as Chief Sustainability Offices to further explore the effects of materiality matrices in their eyes. Especially given that Chief Sustainability Offices are closer to the decision-making arena, insights from them may reveal the influence of graphical inscriptions in the boardroom. Theoretically, the notion of materiality is widely discussed in the financial accounting and auditing literature (see, Moroney and Trotman, 2016; Khan, Serafeim and Yoon, 2016) and thus it would be interesting to explore whether field materials about materiality in the context of sustainability can extend our traditional understanding of materiality in financial terms.

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Chapter 5 (Paper 2) Are companies walking the talk in their sustainability reports: a pragmatic view on corporate water disclosures

Abstract

This paper concerns the interplay between corporate sustainability reporting and corporate sustainability-related actions. Specifically, legitimacy theory and its variants infer that as sustainability reporting is a legitimising tool, the reporting content is disconnected from organisational actions (see, Neu, Warsame and Pedwell, 1998; De Villiers and Van Staden, 2006; Laine, 2009; Boiral, 2013; Tregidga et al., 2014; Cho et al., 2015). Through research and fieldwork into a public listed beverage company's water disclosures and water-related actions, this paper provides a contrasting argument. The researcher finds that the case company's water (efficiency) reporting is not only accompanied by water saving actions within its breweries, but also is complemented by a company-wide water risk assessment and the resultant actions to mitigate external water risk. On this basis, the researcher contributes to the sustainability reporting literature by showing that the thesis of disconnection between corporate sustainability-related talk and action can also be understood in a sense of action over reporting as opposed to reporting over action. In addition, the researcher also finds that the case company's water-related actions had existed long before its water reporting emerged. After the case company's water reporting came about, its water-related actions remained much the same as before. On this basis, the researcher further problematises the societal and especially policy makers' taken-for-granted belief in reporting's ability to drive actions and changes.

5.1 Introduction

According to KPMG (2017), the rate of corporate sustainability reporting by large companies in developed regions such as the UK has exceeded 99%. Accompanying this progress, however, is a critical voice informed by legitimacy theory and its variants in the sustainability reporting literature, which suggests that companies strategically mobilise sustainability reporting as a public relation tool to show that they are conforming to prevailing social norms (see, Patten, 1992; Patten, 2002; Deegan, 2002; De Villiers and Van Staden, 2006). Some proponents of legitimacy theory go on to infer that as sustainability reporting is ill-motivated, reporting content is likely to be disconnected from organisational actions (see, Neu, Warsame and Pedwell, 1998; De Villiers and Van Staden, 2006).

In recent years, the theory of legitimacy is evolving to take in nuance as a theoretical lens such as the concept of simulacrum (Boiral, 2013), discourse theory and identity formation (Tregidga et al., 2014) and organisational façade (Cho et al., 2015), but the basic legitimacy logic remains unchanged. The common thread throughout these literature is the argument that corporate sustainability reporting is strategically motivated and the implicit or explicit inference that the reporting content is partial, incomplete and are disconnected from organisational actions and impacts (see, Boiral, 2013; Tregidga et al., 2014; Cho et al., 2015).

The researcher appreciates that all forms of representation including sustainability disclosures are partial and incomplete, but the inference that such incomplete disclosures are disconnected from organisational actions is debatable, especially if we review Dowling and Pfeffer's (1975) seminal work that is heavily cited by the following sustainability reporting literature. Dowling and Pfeffer (1975) point out that organisations can not only mobilise communication strategies (reporting) but also take tangible actions to cope with legitimacy threats. The focus on the communication strategies such as corporate sustainability reporting in the accounting literature overlooks the fact that companies are likely to repair legitimacy through taking tangible actions. If we take the option of action into account, there will be two more possibilities. First, reporting is not necessarily disconnected from actions, as it is possible that companies undertake reporting and action strategies concurrently to mitigate legitimacy threats. Second, companies may elect to only take actions to maintain legitimacy. In this situation, the partiality and incompleteness of sustainability disclosures are not necessarily problematic, because the incomplete disclosures have the potential

to be complemented by actions in practice. These two possibilities are the propositions of this study.

Voluntarily electing to maintain legitimacy through taking actions sounds absurd, as it clashes with the entrenched belief in the sustainability reporting literature that talk is always cheaper and thus preferable relative to action. This is however, possible from a pragmatic view on the incompleteness of reporting (Power, 2007; Jordan and Messner, 2012), which suggests that practitioners prefer solving problems through taking actions to designing a set of ‘complete’ or ‘perfect’ performance indicators. Jordan and Messner (2012, p.551) emphasise that for practitioners, “doing something had priority over measuring it”. They also argued that performance indicators are mainly seen by practitioners as guidance as opposed to ‘colonisation’ (Power, 1997), which means that the scope of practitioners’ actions will not be circumscribed by the incomplete indicators. This pragmatic contention allows the researcher to conjecture that a sustainability report, albeit incomplete may be accompanied by some organisational actions and even has the potential to be complemented by additional actions on the ground.

Given this pragmatic view that reporting cannot exclusively cover organisational actions, a rounded evaluation of the completeness/incompleteness of corporate sustainability reporting requires not only reports/inscriptions analysis but more importantly calls for more in-depth fieldwork to follow the inscriptions and observe corporate actions on the ground. This point echoes Hopwood (2009), Cho et al. (2015) and O’Dwyer and Unerman (2016), who point out that current sustainability reporting literature necessitates in-depth fieldwork to add more insights. The fieldwork of this study was undertaken between 02/2016 and 07/2017 and comprised of two interrelated stages. In the first stage, the researcher undertook a few interviews with corporate sustainability reporting managers in public listed companies and several NGO members in a bid to familiarise myself with the context of sustainability reporting as well as explore the practitioners’ perceptions of the completeness/incompleteness of sustainability reports. Specifically, the researcher explored their interpretations of the ‘completeness principle’ provided by the GRI (Global Reporting Initiative) G4 Guidelines (2013). Meanwhile, the researcher was surprised that the NGO members interviewed unanimously referred to the water efficiency indicator as a counter example when they talked of the ideal of complete reporting. A water efficiency figure that measures water consumption per unit of product is argued to be inward-looking only. It is incomplete, as it has little correspondence with the external social and hydrological context. Hence,

it was discerned that water efficiency indicator has the potential to provide the researcher with a valuable context to further unpack the completeness/incompleteness of corporate sustainability reporting.

The researcher then started the second research stage by undertaking a case study of a public listed beverage company, which has been reporting water efficiency for a number of years. In total, the researcher interviewed nine staff within the case company and 10 external people who are relevant to the case company's water-related action and reporting. This is accompanied by the analysis of internal and external documents and is further followed by six confirmatory interviews and two observations in the case company's breweries. In this stage, the researcher explores: Is the incomplete water efficiency reporting perceived as a problem? What are the actions, if any, underlying water efficiency reporting? Is the water efficiency reporting exclusively prescribing the case company's water-saving actions or being complemented by additional actions?

The researcher finds that most of the internal interviewees do not see the incompleteness of the water efficiency figure as a problem, because their water protection actions are not circumscribed by this figure. Not only is the water efficiency figure accompanied by large amounts of water reduction actions, but also this incomplete indicator is being complemented by additional actions such as a company-wide water risk assessment and partnerships with NGOs to protect local water sources. As such, this paper contributes to the sustainability reporting literature by arguing that an incomplete sustainability report is not necessarily problematic and that the thesis of disconnection between corporate talk and action in the area of sustainability can also be understood in a sense of action over reporting. The argument further offers some thoughts for research specialisation. The lack of investigation into actions in the sustainability reporting literature might be caused by the nature of the accounting discipline, which inherently focuses on reporting. The contrast between accounting academics' pursuit of complete sustainability reports and practitioners' preoccupation with problem solving through actions evidences the need for engagement between these two communities.

The rest of this paper will proceed as follows: Section 5.2 offers a review of sustainability reporting literature with a focus on the legitimacy theory-based studies. This is followed by Section 5.3, which introduces the pragmatic view on incompleteness. The iterative research process will be

described in Section 5.4. The researcher presents field materials in Section 5.5 and the paper will be closed by Section 5.6 with a summary of contributions made to the literature.

5.2 A review of sustainability reporting literature and research problematisation

The phenomenon of corporate sustainability reporting has received considerable attention in the accounting literature (Patten, 2002; Deegan, 2002; Gray, 2010; Cho et al., 2015). Given that sustainability reporting has not been made mandatory in the vast majority of regions, researchers tend to question why reporting entities volunteer to disclose such information (Deegan, 2002). Among these studies, legitimacy theory and its variants are the most dominant perspective in explaining the motivations of such voluntary reporting behaviour (Deegan and Blomquist, 2006; Unerman and Chapman, 2014). Legitimacy theory suggests that companies leverage sustainability reporting as a strategy to show that they are conforming to the prevailing social norms (see, Patten, 1992; Patten, 2002; Deegan, 2002; De Villiers and Van Staden, 2006). Patten's (1992) early work views social and environmental disclosures as a response to the changing perceptions of the relevant public. He identifies that an environmental incident committed by a single company is a threat to the legitimacy of the whole industry. Companies in the same industry increase their environmental disclosures dramatically afterwards to address the concern of the relevant public. Similarly, Patten (2002) and Cho and Patten (2007) find that the amount of corporate sustainability disclosures are negatively correlated with their environmental performance and on this basis, argue that companies tend to utilise an increasing number of sustainability disclosures to conceal their poor environmental performance with a view to maintaining legitimacy within society. This is complemented by De Villiers and Van Staden (2006), who argue that companies are also likely to reduce the volume and specifics of their environmental disclosures in a bid to maintain legitimacy, as detailed disclosures are more liable to contain sensitive information and can be further translated into new legitimacy threats.

Neu, Warsame and Pedwell (1998) further unpack companies' reactions to legitimacy threat by dividing the relevant public into specific stakeholder groups. They find that the level of environmental disclosures in annual reports is more driven by the concerns of powerful shareholders and regulators than by environmentalists' criticism covered in the media. Therefore, they (p.280) argue that, "environmental disclosures can be read as attempts to select specific positive examples of organisational action from the larger domain of organisational activities while

re-framing or ignoring negative organisational actions made visible by other parties”. In this regard, De Villiers and Van Staden (2006, p.766) draw the similar inference that, “environmental disclosures are always partial and selective, because they are used to manage public perceptions”. To sum up, legitimacy theory advances our understandings of the motivation of sustainability reporting and some of its proponents such as the aforementioned Neu et al. (1998) and De Villiers and Van Staden (2006) infer that sustainability reporting is a partial and incomplete representation of organisational actions. This inference largely resonates with several other widely cited sustainability reporting studies as follows.

Adams (2004) through checking with external information sources, argues that her case company’s sustainability report represents its actions in an incomplete way, because the report omits their negative impacts on communities and the natural environment and lacks disclosures concerning overseas operations. This argument is further reinforced by Boiral (2013), who finds that more than 90 percent of the adverse events that are covered in the media are not voluntarily disclosed by companies through their sustainability reports. Even the reported events take on an incomplete form such as a short and brief mention of the fine for an environmental incident, which is likely to be overlooked in a report of more than 100 pages. On this basis, Boiral (2013) concludes that corporate sustainability reports are simulacra, which are very incomplete and are disconnected from organisational actions.

What is more, Tregidga, Milne and Kearins (2014) discern that over three periods of time the case companies present and re-present their sustainable identity through emphasising that they are compliant with environmental regulation; they are leading sustainable development; they can achieve a ‘win-win’ result that benefits both shareholders and broad stakeholders, respectively in their sustainability reports. In this way companies construct a leadership identity in relation to sustainable development. Nevertheless, these discourses present companies themselves as central whilst “society and the environment are positioned as subordinate” (p.491). Such positioning exaggerates companies’ potential as a change agent, which can shield companies from real critique and more stringent regulations. As such Tregidga et al. argue that corporate sustainability reporting is “a strategic, symbolic and legitimising device” and that “the change they posit may be largely rhetorical” (p.491).

Similarly, Cho, Laine, Roberts and Rodrigue (2015) partition the content of corporate sustainability reports into three types of organisational façades, that is, the rational façade in the name of maximising shareholder value, the progressive façade embodied by paying attention to externalities caused by the production and the reputation façade with an emphasis on social and environmental stewardship. They identify that corporate talk in the sustainability reports and actions are consistent under rational façade, but the progressive and reputational façades are rarely followed by tangible actions.

To sum up, the interpretation of corporate sustainability reports in the accounting literature is dominated by legitimacy theory. While in recent years the theory of legitimacy is utilised in combination with more nuanced theoretical lens such as the concept of simulacrum (Boiral, 2013), discourse theory and identity formation (Tregidga et al., 2014) and organisational façade (Cho et al., 2015), the basic legitimacy logic persists. The common thread throughout the sustainability reporting literature is the argument that corporate sustainability reporting is strategically motivated and the implicit or explicit inference that the reporting content is partial, incomplete and are disconnected from organisational actions and impacts.

The legitimacy logic significantly advances our understandings of the nature of corporate sustainability reporting practice. We have learned that corporate sustainability reporting is strategically motivated. That said, the researcher argues the criticism that sustainability reporting content is partial, incomplete and is disconnected from organisational actions might be overdone, especially if we review Dowling and Pfeffer's (1975) seminal work that is heavily cited by the sustainability reporting literature. Dowling and Pfeffer (1975, p.127) conjecture that organisations can leverage three activities to become legitimate:

“First, the organisation can adapt its output, goals, and methods of operation to conform to prevailing definitions of legitimacy.

Second, the organisation can attempt, through communication, to alter the definition of social legitimacy so that it conforms to the organisation's present practices, output, and values.

Finally, the organisation can attempt, again through communication, to become identified with symbols, values, or institutions which have a strong base of social legitimacy”.

It is suggested that organisations can not only mobilise communicative strategies (second and third activities) such as sustainability reporting but also take real actions (first activity) to cope with legitimacy threat. The focus on the communicative strategies in the accounting literature overlooks the fact that companies are likely to repair legitimacy through taking tangible actions. In this

situation, the critique that sustainability reporting content is partial and incomplete is debatable, because such incomplete reports are likely to be accompanied or even complemented by actions on the ground.

The lack of examination of corporate environmental actions is also noted by Neu et al. (1998, p.280), who reflect upon the fact that the analysis of environmental reports “says nothing about the “truth” or “falsity” of these disclosures” and that

“only to a limited extent and at an aggregate level did the analysis and illustration make visible the types of actions that are reported vis-à-vis those that are not. Thus, future research that examines the types of organizational actions that are reported, re-framed and ignored, compared to the larger domain of organizational action, holds the potential to extend our understanding of the association between organizational actions and environmental disclosures”.

Taking these suggestions together, this paper aims to further unpack the ‘partiality’ and ‘incompleteness’ of corporate sustainability reports by raising a few research questions: Is the ‘incompleteness’ of corporate sustainability reports problematic? What are the actions, if any underlying these incomplete disclosures? Are these incomplete disclosures being complemented by additional actions on the ground? The researcher has explained in the introduction that from a pragmatic view of incompleteness, it is possible for companies to elect to maintain legitimacy through taking actions. This pragmatic view will now be elaborated in the following section.

5.3 A pragmatic view on incompleteness

According to Jordan and Messner (2012), a pragmatic view on incompleteness is initially developed by Power (2007), who notes that such incomplete representation is tolerable by practitioners if right actions are being guided. Hall (2010, p.313) adds that, “judgements about the quality and relevance of accounting information should relate primarily to whether it helps managers to carry out their work and less to whether it adequately describes underlying organisational activities”. Jordan and Messner (2012) name practitioners’ indifference to the representational quality of performance indicators as a pragmatic view on incompleteness and further flesh out a more relaxed attitude towards the incomplete representation. They argue that the incompleteness of accounting representation is not a primary concern for practitioners as long as they are not required to undertake actions exclusively with reference to performance indicators imposed by senior management. As an example, while top management of their case company prescribes performance indicators that focus on product quality, front-line managers are allowed

flexibility to take actions that aim for improving innovation. In this case, practitioners have little interest in repairing the incomplete performance indicators regarding product quality, as their work on innovation is not impeded by these indicators. On the basis of these arguments, Jordan and Messner (2012, p.552) summarise that a pragmatic view on incompleteness suggests that practitioners “prioritised concern for this world of action over questions of representation and measurement” and that the incomplete reporting is not necessarily problematic, as such incompleteness has the potential “to be completed in the world of action”.

Drawing on this pragmatic view, the researcher argues that a sustainability report, albeit incomplete may be accompanied by some organisational actions and even has the potential to be complemented by additional actions on the ground. Given this pragmatic view that reporting cannot exclusively cover organisational actions, a rounded evaluation of the completeness/incompleteness of corporate sustainability reporting requires not only reports/inscriptions analysis but more importantly calls for more in-depth fieldwork to follow the inscriptions and observe corporate actions on the ground. The fieldwork process will be elaborated in the following section.

5.4 An interpretive and iterative research process

The fieldwork was undertaken between 02/2016 and 07/2017 and mainly comprised two interrelated stages. First, the researcher undertook a few⁵ interviews with corporate sustainability reporting managers across 10 FTSE 350 companies and four ASX 200 companies and several NGO members in a bid to familiarise myself with the context of sustainability reporting as well as explore these practitioners’ understandings of the ‘completeness’ reporting principle provided by the GRI. During the period, the researcher was surprised that the NGO members interviewed unanimously referred to water efficiency indicator as a counter example when they talked of the ideal of complete reporting. Water efficiency indicator measures water consumption per unit of product and is widely reported by companies in water intensive industries. The figure is argued to be inward-looking and incomplete, as it has almost no correspondence with the external social and hydrological context. Hence, the researcher discerned that water efficiency indicator has the potential to provide the researcher with a valuable context to further unpack the completeness/incompleteness of corporate sustainability reporting. Coincidentally, one of the

⁵ These interviews are not directly used in this paper.

reporting managers interviewed came from a publicly listed beverage company, which has been reporting water efficiency for a number of years. He introduced the researcher to the water expert within the company, who was managing their internal water reporting. The researcher was further introduced to the head of water and their Senior Vice President, who had general oversight of their company's sustainable development. The second stage of fieldwork unfolded in this way. In this stage, the researcher followed the case company's inscriptions such as their water efficiency figure and water risk assessment document to meet with performers backstage and interrogate the underlying water-saving actions that are being inscribed, in an attempt to explore: what are the actions underlying water efficiency reporting? Are their water-saving actions exclusively prescribed by water efficiency indicator or is there only a loose fit between water efficiency reporting and water-saving actions on the ground? In total, the researcher interviewed nine staff within the case company and 10 external people who are relevant to the case company's water-related action and reporting. This is accompanied by a series of internal and external documentary analysis and is further followed by six confirmatory interviews and two observations in the case company's breweries. The identity of interviewees and the times and timings of interviews are listed as follows:

Table 5.1 Interview summary

	Internal interviewee	External interviewee	Times	Timings (minutes)
1	Senior VP		2	51 and 20
2	Head of Water		2	44 and 33
3	Global director of managing carbon and water		1	35
4	Regional engineering lead		2	49 and 47
5	Water expert		2	49 and 52
6	Sustainability reporting manager one		2	44 and 25
7	Sustainability reporting manager two (Intern)		1	20
8	Plant Manager		2	Approximately 180 minutes including observations
9	Front-line worker		1	Approximately 180 minutes including observation
10		Member of NGO One	1	47
11		Member of NGO Two	1	41
12		Another member of NGO Two	1	54
13		Member of NGO Three	1	49
14		Member of NGO Four	1	61
15		Member of NGO Five	1	32

16		Water expert (peer company)	1	30
17		Head of sustainability (peer company)	1	80
18		Director of sustainability (another peer company)	1	38
19		Member of beverage industry association	1	50

5.5 Research context: water efficiency figure—partial, incomplete and mobilised as a legitimising tool

The current field study was undertaken in a public listed beverage company. The case company hereafter is given the pseudonym BeerCo. As a beverage company, water is the main ingredient of Beerco’s products and thus is key to the continuation of the business. Correspondingly, Beerco’s water reporting receives considerable attention both within and outside of the company. As with most beverage companies, Beerco’s water reporting is dominated by the water efficiency figure, which is placed in a prominent location of both the company’s webpage and its sustainability reports. Such reporting, however, invites severe criticism in the field. As is mentioned in Section 5.4, the NGO members interviewed unanimously criticised the water efficiency figure for its failure to account for the local context, be it hydrological or social. Criticism from five NGO members are listed as follows:

“The truth is that I think that these water efficiency numbers are almost irrelevant. It’s a footprint measurement that doesn’t tell you anything about the context or the real issues. It’s an issue that the beverage companies are continually trying to tell you that it takes only three litres of water to produce a litre of beer or something, but of course that’s not accounting for the agricultural footprint. It’s certainly not accounting for the context or the risk issues and so to be honest with you there are many ways to measure this. I just don’t think that it’s very valuable. I don’t think it tells you much. How efficient they are doesn’t tell me very much at all. It tells me they have good plant engineers. Big deal”. (Interviewee 10)

“Corporations, companies need context-based water metrics for the same reason they need context-based metrics for every other area of impact. In order to do meaningful – in order for sustainability measurement and reporting to be meaningful it must be context based because unless it's context based it fails to take underlying ecological conditions explicitly into account. The alternative to context-based measurement and reporting is what most of us currently refer to as incremental reporting, and so incremental reporting for water use would be something like, ‘This year we used 10% less water than we did last year. For next year we’re going to set a target of even less water use by 5%.’ So even if all of those targets are hit and even if water consumption is decreasing on a year on year basis we still have no way of knowing whether or not even the decreased use of water is sustainable because we have failed to take the background ecological conditions explicitly into account. This, as I say, unfortunately is what passes for mainstream practice still today in most organisations”. (Interviewee 14)

“The emphasis on measuring litres of water travelling in various directions misses some key considerations around water as an environmental issue, namely that water is always a local issue and therefore context is everything. The methodology considers if the company is able to measure how much water it is using, but that information isn’t useful without the context of whether this is in rainy northern Europe or dry south-western USA, for example. If the company has no understanding of hydrological context, what’s the use in them measuring this data?” (Interviewee 12)

“Because water is such a local issue, I think being able to set targets and report locally based, in comparison to the issues that are happening locally. And I’m not trying to solve that, if the companies are reporting globally, how do you report that way? I think there are ways to do, but it’s much more complex than just saying ‘We’ve reduced our water use by 20 percent over the last 10-years’. I think those nuances which reflect our complicated waters, and our local waters need to be reflected in the reporting”. (Interviewee 13)

“An ambitious water target is for a company is to reduce water withdrawals by 10%.’ Why is that ambitious?...Certain targets such as reduction of water withdrawals – it can be through efficiency improvements and it can be through other things. Unless it is based on the actual change that is required in a river basin and level to aspire to certain desired conditions, the level of ambition is questionable. It’s hard to determine whether it’s the right target or not unless that target is backed by some sort of scientific information that supports that target”. (Interviewee 15)

From the NGOs’ criticism, it is not difficult to find that water efficiency is a partial and incomplete figure, as it has almost no correspondence with the external social and hydrological context. Nonetheless, the water efficiency figure is still actively reported, because as the senior VP explained:

“Because at the moment they (investors) see it as an indicator of how you manage water. That is now changing because they’re becoming more sophisticated and they’re beginning to understand watershed protection and watershed risks but at the moment, yes, it’s still valid”. (Interviewee 1)

The quote vividly evidences Neu et al.’s (1998) argument that corporate environmental disclosures are driven by the perceptions of financial stakeholders. The water efficiency figure is reported not because it can account for organisational actions and impacts in a holistic way but because powerful investors think it can. The advantage of doing so is that it can reassure investors and help the reporting entity maintain legitimacy within society.

Water efficiency reporting as a legitimising tool is also embodied in the selection of its reporting frequency. BeerCo elects to report its water efficiency performance on an annual basis as opposed to more frequently at least in part because the aggregated figure can hide short-term fluctuations. BeerCo’s senior Vice President candidly revealed that:

“There is a seasonality, because a lot of our beer are brewed in the southern hemisphere. That means the volume peak is in the southern summer. What I am trying to say is the

water efficiency indicator tends to be not so good in the first half of the year from April to September and in the back of the year when big volumes come through in the southern hemisphere, then all the indicators are improved...You see in the internal report that the target for a year is to make 5% water efficiency improvement. You might make 1% of the improvement between April and September and then 4% of that improvement between September and April...I want them to see the long-term trend. We hold accountable for that. I don't want them to get confused by the short-term fluctuations". (Interviewee 1)

Such selectivity is aligned with the argument that reporting entities are likely to manipulate their environmental disclosures with a view to concealing poor environmental performance and maintaining legitimacy (Cho and Patten, 2007).

Up to this point, the researcher has illustrated that corporate water efficiency reporting is partial, incomplete and is motivated by a concern for maintaining legitimacy. These emic views confirm the argument of prior literature dominated by the legitimacy theory and provide a valuable context to further interrogate the inference of legitimacy theory, namely are incomplete disclosures necessarily problematic and are disconnected from organisational actions? In what follows, the paper will explore: is the incomplete water efficiency figure necessarily disconnected from BeerCo's actions on the ground? What are the actions if any, underlying its water efficiency reporting? Are BeerCo's water-saving actions exclusively prescribed by the water efficiency indicator or is there only a loose fit between water efficiency reporting and water-saving actions on the ground?

5.5.1 Water efficiency reporting and the underlying water saving actions

"In the 1990s, we manually cleaned the tun. After completing a batch of fermentation, one worker jumped into the tun, using a pipe to clean the inwall of the tun. This was then replaced by pivot sprinklers. You know, the water pipe will consume much more water than a pivot sprinkler". [Translation⁶] (Interviewee 8)

BeerCo's first sustainability report was produced in the year 2007, but as the plant manager recalled during the researcher's site visit that water saving actions at BeerCo's breweries can be traced back to the early 1990s. This was confirmed by the senior VP, who suggested that "when I came in 2007 it (water efficiency) was already being used as an indicator" (Interviewee 1). In the early days, BeerCo's water saving actions were inspired by its successful experience in reducing cost through energy savings. BeerCo's head of water explained this:

⁶ Interviews during two site visits were conducted using Chinese. 'Translation' here means that the quote was translated from Chinese into English.

“Water efficiency came from focusing on energy...All the companies were actually much more starting on energy and therefore moving on to water, so energy was one of the biggest financial saving, but we starting on that and therefore also including water, because the same people who manage energy and water together in the company”. (Interviewee 2)

Saving water at that time was seen as a potential opportunity to further reduce the cost for the company. The global director of managing energy and water efficiency, who has been working in BeerCo for over 20 years as a technical leader, recalled that, the technical team at the time spent considerable time on identifying the drivers of increasing water efficiency:

We’ve done statistical analysis on all the drivers of water efficiency...And what we find is that operational side of it... has a far bigger impact than does the actual plant and equipment. So when it comes to water savings, we talk about it in the order of people then process, then technology. So technology is actually the least important of those three, in terms of water savings. So people and discipline and doing things correctly and not wasting water, site discipline is the most important and processes is the next most important, in terms of the way in which you do your cleaning, the way in which you do your brewing, the way in which you do your packaging and what processes changes we can make. (Interviewee 3)

As water saving primarily depends upon workers’ way of operationalisation, BeerCo’s water management team at the global head office implemented an incentive scheme to reward/sanction water-saving/wasting actions. An internal water expert argued that: “you need innovation and you need people’s attention and activity to deliver efficiency that’s why we incentivise it” (Interviewee 5). The incentive scheme was implemented through “putting a dollar value” (Interviewee 5) to the potential water savings in each stage of beer production. BeerCo’s head of water articulated this point:

“We spent a long time and have developed an internal approach. We look at the different costs of different water inside the brewery. When the water comes in, this is the municipal water that arrives. Then the water comes into the brewery, here we would first filter it, make sure it’s clean then we may treat it, to get it to the right quality that we require then we would boil it because we are making beer, then we might use water to cool to get it to fermentation so in here you what we called dewater, de-aerate it so you take the oxygen out then into the brewing process. Then you have beer. If we lose say we pay 10 US cents per litre of water. If somehow in our storage tank, it’s not efficient, that’s going to cost us if we lose a litre, but by the time I’ve got some filtration cost, by here maybe costs 11 cents, if I treated it cost maybe 12 cents, if I boil it, it cost 20 cents or more, then by here it might cost 30 cents, and then by here it may cost 40 cents”. (Interviewee 2)

Accurately figuring out the water-related cost incurred in each stage of the case company’s beer production is beyond the scope of this study, but it is worth noting that these potential cost-savings were further connected with managers and front-line workers’ bonuses and was implemented across all BeerCo’s breweries. It is elaborated that:

“Every brewery in their group has got targets and they need to meet those water efficiencies targets and, overall, those targets have to roll-up to try and achieve the overall group target that we have promised originally – which was a 25% reduction from 2008-2015 and then we made another promise, which was to get below three (water to beer ratio) by 2020. So, that’s very closely monitored on all sites or tracked... They (water efficiency figure) are also involved in the brewery rankings; So, we have a hierarchy of, ‘where are you? Are you in the top quartile or the top ...?’ So, there’s competition between the breweries, which is quite important and so the guys would try and improve all those metrics to get higher up the brewery ranking, in terms of that ladder if you like. Different breweries might have different incentivised bonuses but certainly they would all have something in there with regard to what ranking they were being incentivised to get to and/or they would have something in terms of what sustainable development targets that site would be asked to get. So their carbon, their water and their energy would be part of their performance metric of a plant manager and then that would get cascaded down to equipment manager, Brand manager and Packaging manager, where they would have a specific water number that they knew that they had to hit every year”. (Interviewee 3)

Under this company-wide incentive plan, it is unsurprising that there would be large amounts of water-saving actions in local breweries. During the site visit, a front-line worker mentioned an example of water reuse:

“[Translation] When the water comes into our brewery, it consists of various microelement such as sodium. For beer production, we require very high quality water and so we have to first of all filter these microelements. The water carrying these microelements will be filtered out as well. We call such carrier concentrated water. Previously, concentrated water will be dropped, but now we use it to flush the toilet”. (Interviewee 9)

Another example of water recycling and reuse is related to the hot water discharged by the hot wort cooling machine. The hot water that flows from the cooling machine will be transferred to the pasteuriser and be reused there. In front of the Picture 5.1, the plant manager explained this operation:

Picture 5.2 Hot wort cooling plate



“[Translation] Before fermentation, the boiled wort needs to be cooled in the hot wort cooling plate. Inside the machine, there is a sealed water tank. The space between the water tank and the inwall of the machine is filled with ice water. When the hot wort flows through the water tank, the heat of the wort will be transferred to the cooling water outside the water tank. The cooling water will gradually become hot. Such hot water will be transferred to the pasteuriser. As you know, the water is separated from the wort. There is no contamination and so the water can be re-used to pasteurise. The pasteurisation just needs hot water”. (Interviewee 8)

The researcher then saw the pasteuriser (See Picture 2). The plant manager continued that:

“[Translation] Inside the pasteuriser, cans and bottles are moving on the conveyor belt whilst hot water is spraying from above. The pasteuriser has a water replenishing system. When water is consumed, the system will pump the same amount of water automatically. The pasteuriser is closely connected with the packaging machine. When a can is stuck in the packaging line, the whole operation will stop. But the water in the pasteuriser is still spraying. This is wasting water. Now, we pay attention and will close the water gate of the pasteuriser immediately when the production line stops working for whatever reason”. (Interviewee 8)

Picture 5.3 Pasteuriser



This offers an example as to how the changes in workers' way of operationalisation can reduce water consumption and increase efficiency. The final stage of beer production is packaging, which is normally preceded by washing used bottles and cans. This cleaning process also contains opportunities for saving water. In an interview with the group director of managing carbon and water, he briefly talked of this point:

“You’ve got returnable bottles and you are using bottle washes, the design of your bottle washer and how much water that use would be key”. (Interviewee 3)

This was elaborated by the plant manager during the site visiting:

“[Translation] We wash the cans and bottles by soaking them in the hot water. The label papers and other residuals are soaked out into the water. After washing two batches of beer bottles, the water becomes turbid and so needs to be discharged and renewed. Now we have advanced filtration system. Some of the residuals can be filtered. The same amount of water can be used to wash more batches of bottles”. (Interviewee 8)

The examples provided here are not exhaustive, but aim to illustrate that while as it is discussed in Section 5 the water efficiency figure is incomplete and is motivated by a concern for legitimacy in its external reporting process, it is not necessarily disconnected from water saving actions on the ground. Given that water savings have been connected with the payment of managers and workers

at most of BeerCo's local breweries, the researcher argues that the examples of water savings are not peculiar to the two breweries that the researcher visited but an embodiment of the company-wide actions. In this regard, BeerCo's head of water argued that:

We had thought that we should probably focus more on water efficiency, in the areas, which are water scarce. But in reality that didn't turn out that way... It shouldn't be treated any differently... because then what you have, you have areas, which are quite rich in water. You see oh they can waste water. So we drive efficiency in any case whether there is a water risk or not, so even in the sites that we got lots of water and it's for free, we still say that you can't waste water". (Interviewee 2)

Up to this point, we have illustrated that the water efficiency reporting is accompanied by considerable water-saving actions inside of the brewery and will go on to explore whether or not the inward-looking water efficiency figure has the potential to be complemented by additional actions that focus on external water sources and local communities in the following section.

5.5.2 An outward-looking water risk assessment and the resultant actions to mitigate water risk

"It started off, water has always been an efficiency driven measure. Water linked to other consumable items, would have been in focus, because of the systems that look at waste and loss, so water came into focus with that. But the context of water changed when the organisation got a little bit bigger and was starting to work in water stressed areas, so the context naturally changed for the business. It was still an efficiency measure or an efficiency driven reporting process, but we had to worry about other things that changed in that context. So water stressed areas, you're going to find quality of water bearing, you are going to find that quality is often driven other stakeholders that are using the same watershed and same water sources. If you are drawing water from a source that potentially could be polluted by mining or petroleum or products, those sorts of things, then obviously, you need to start to focus on the watershed. So, if there is subsistent agriculture in that watershed for example, you are going to have problems with your water supply, because you are going to have increased soil entries, nitrates, increased pesticides in your water. I know in some parts of the world where that context was prevalent that we would work with farmers to improve the way they work, to make sure that the water sources were protected from erosion from run off of nitrates, fertilisers or pesticides. Similarly, with other industries you would be working with them". (Interviewee 4)

The lengthy quote from the regional engineering lead especially his argument that "it was still an efficiency measure or an efficiency driven reporting process, but we had to worry about other things that changed in that context" suggests that the incomplete water efficiency figure is being 'completed' by additional actions that look after the external social and hydrological context. These outward-looking activities are called "water risk assessment" within BeerCo. BeerCo's water risk assessment "has been in place for a long long time" (Interviewee 4), but the problem with the assessment lies in that different breweries implement their own approaches and thus

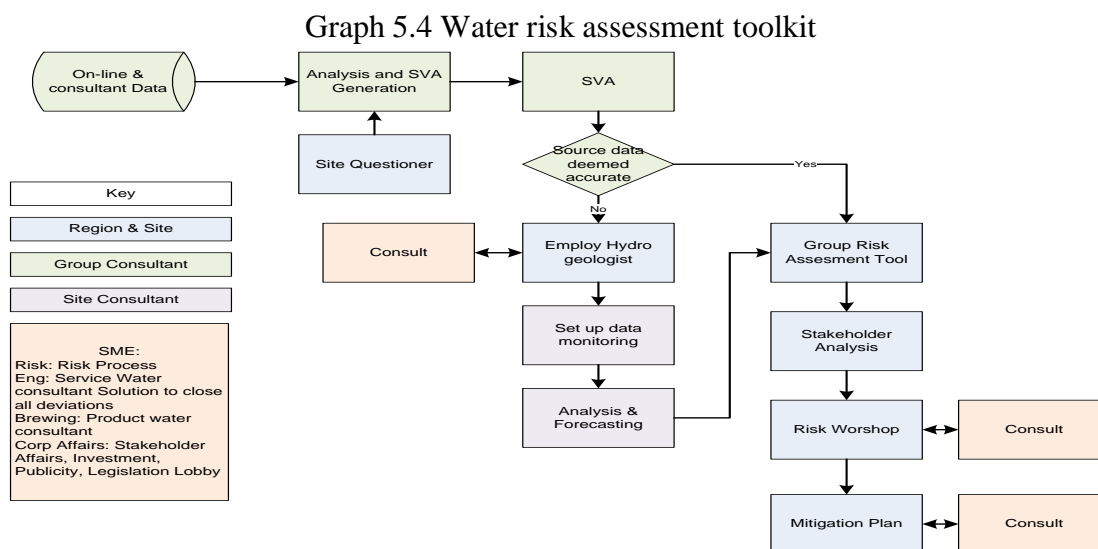
“when you are trying to compare one region with another, it is very difficult” (Interviewee 4). An example was further provided by the regional engineering lead:

“Actually a classic example of this is Italy for example, with EU funds we had a brewery in Bali that created an impression that there was severe water scarcity but when we did our own work we realised it wasn’t like that, why did they do that was to get the EU to release funds for them to rebuild the water infrastructure, so, you know, and that is why a commoner method of assessment is so important”. (Interviewee 4)

To tackle this problem, BeerCo designed a water risk assessment toolkit (see, Graph 5.4) in 2013 and have implemented it across most of its breweries by the time of the researcher’s fieldwork.

The vice president elaborated that:

“It was made a requirement by the company’s executive committee, the board. It was made a requirement for every site to do it (water risk assessment) because the company was concerned that water risk was a growing issue in multiple places and the best thing to do was have a comprehensive response to make sure we understood all of the risk”. (Interviewee 1)

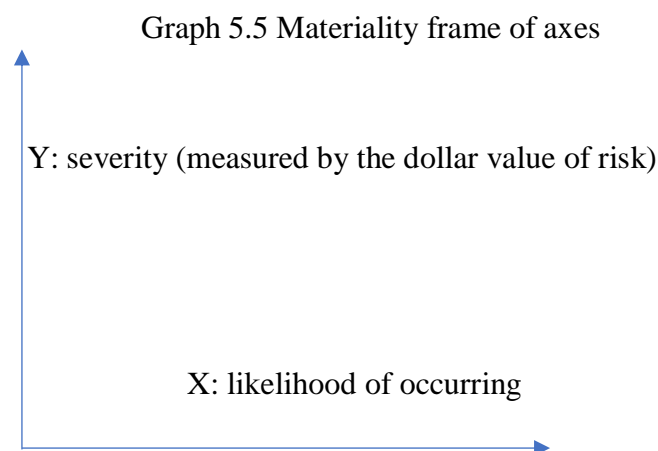


The water risk assessment process begins with a data collection stage undertaken by a consulting firm authorised by BeerCo’s head office. The consultancy “would source data from online public sources and they would get inputs from us from a site questionnaire and they would meet some of the local authorities” (from an internal document). Central to the first step is collecting data about the capacity of the watershed and aquifers surrounding BeerCo’s local breweries. The data collected are further fed into a “Source Vulnerability Assessment (SVA)”, which evaluates both the potential impact of the breweries’ water extraction upon the health of local water sources and

the threat of the variant hydrological context to the operation of breweries. After the SVA, the flow chart (Graph 5.4) is divided into two paths. A document provided by an interviewee suggests that:

“Output recommendations of the SVA are likely to be accurate for sites with good published data (typically sites without a problem or the resource forms part of a critical state resource) but less so for problematic geographies where government entities are not structured to effectively support water management or they are private unmanaged resources. Breweries should be categorised after the SVA and decisions made on the scope of further work. Then at sites where we don’t have a clear picture of the watershed we will need to conduct our own investigations and data collection”.

After further investigation is conducted by local breweries and sufficient data about the watershed is collected, this water risk assessment process will enter into next stage called “Group Risk Assessment Tool”. The Risk Assessment Tool serves to decide the relative importance of the water-related risks facing BeerCo’s breweries. Within this phase, the materiality is decided with reference to the frame of axes as follows:



The axes are labelled “severity” in terms of dollar value of risk and “likelihood of occurring” with priorities assigned to different risks. The top right quadrant of the matrix represents the risks that are deemed most material. The internal water expert explained:

“We look at materiality in terms of dollar value. Also, what we could also do from our corporate perspective is for example the infrastructure risk for us even if it is a small value country, if we see infrastructure being a repetitive risk across ten, fifteen or sixteen countries, then we believe infrastructure is a risk for our company, because we see it in more than one country. It’s a pattern we see. So it is a combination of re-occurring events related to water stress or availability or infrastructure. It is combined with the ambition to big risk we see based on dollar value. We kind of look at both sides”. (Interviewee 5)

After material risks are screened out, the risk assessment process will progress into the stage of risk mitigation. To mitigate these water-related risks, BeerCo needs to identify and engage with

stakeholders in the same river basin. This is the key task in the stage of “stakeholder analysis” and “risk workshop”. The regional engineering lead emphasised the importance of knowing and collaborating with stakeholders to the design and implementation of the risk mitigation plan:

“Where you have a shared water resource with another company, say it’s a mining company, they need water to wash their ore. That water is going to run back into the watershed and potentially pollute it with heavy metal. You need to discuss with that guy to see what are his mitigating plans. If he doesn’t have any, you might try and help him understand what he’s doing to the environment and help him sort himself out. In that way save the environment and save you. Or you are going to say, “I have a problem with this stakeholder, he’s going to do nothing. What can I do?” You might have to change your water treatment, for example, to make sure no heavy metals get into your plant. Or, if it’s really bad, you might choose to close that plant and move it somewhere else. You have to consult your stakeholders to understand what their plans are, because you’re in a shared resource, so you can’t not understand what else is going on in your patch. You need to understand what other industries and agriculture are in your watershed, are typically the key stakeholders”. (Interviewee 4)

These analyses and engagement lay the foundation for making the risk mitigation plan and taking actions through partnerships with NGOs or directly in collaboration with stakeholders in the same river basin. An NGO member recalled how they collaborated with a subsidiary of BeerCo in the US to mitigate the water availability and quality risks through helping local farmers reduce water and fertiliser use:

“In Idaho we worked with (anonymised, a subsidiary of BeerCo), with their farmers on implementing activities to reduce their impacts on the water resources. So, we did things like put in pivot sprinklers that were really precise about irrigation, so would measure the soil moisture, so it applied just the right amount of water, and no more. And, also reducing the fertiliser use to reduce their impact on water quality... Our interest there was we have a preserve around this creek, or this important water body called Silver Creek which is really important for trout, so the farmers were upstream of that creek. So, we’re really interested in working with the farmers to reduce impacts on the creek, and they (BeerCo) were interested in working with their farmers to have a better water sustainability, but then also help the farmers to be more productive”. (Interviewee 10)

What is more, a water fund manager at an NGO suggested that BeerCo participated in some of their funds to protect water sources in a number of places:

“In Latin America we work on two dozen or so water funds, which is basically a mechanism where a city pays into a fund, or a big water user pays into a fund to help protect their water resources, so they invest in activities in the watershed like reforestation, or agricultural practices, things like that. And BeerCo has participated in several of our water funds in Latin America, so in Colombia, Ecuador, and other places, and that’s been great. Then we also did some work in Africa looking at the potential for water funds in Africa. They helped to fund some work around that, and looking across a whole bunch of cities in Africa looking at water risk but also looking at the potential for implementing water fund-type programmes in Africa”. (Interviewee 13)

Moreover, during the site visiting, the researcher found that a well (see Picture 5.6) inside the brewery has been closed as a result of a more stringent regulation imposed by the local government. The plant manager revealed that the well was closed in May 2016 and since then the brewery has been supplied by the municipal water sourced from the “China’s south-to-north water diversion project”.

Picture 5.6 the closed well in the back yard of the brewery



The plant manager went on to argue that:

“[Translation] The city council organised a conference on the 20th May 2016 to urge big water users to stop extracting groundwater. This is foreseen by us and so we have closed our wells before attending the conference. I spoke at the meeting to show that we have already stopped using groundwater. This is an advertisement of our business! There are more than 1000 delegates, but we take the lead in turning to municipal water”. (Interviewee 8)

He viewed the close of the well as “an advertisement of our business”, which substantiates Dowling and Pfeffer’s (1975) proposition that organisations are likely to adapt their methods of operation (taking actions) to maintain legitimacy. To summarise, we have learned in this section that BeerCo’s water-related actions are not exclusively guided by its water efficiency figure. The water efficiency figure is complemented by a company-wide water risk assessment that focuses on the external watershed and the surrounding communities and the following risk mitigation actions. Readers now might be interested in knowing whether or not the water risk assessment and the following actions are as actively reported to the public as the water efficiency figure. This question will be unpacked in the following section.

5.5.3 Why BeerCo's water risk assessment and the following actions are less reported?

BeerCo's external water reporting system is run by one of its internal water experts and the sustainability reporting manager. The water expert is primarily responsible for responding to the CDP water questionnaire whilst the sustainability reporting manager looks after the company's sustainability report, which includes water-related disclosures. Perhaps due to the nature of their job, the water expert and the sustainability reporting manager have more concern about public and complete accountability and thus are more sensitive to the NGOs' criticism about the incompleteness of the water efficiency figure. The sustainability reporting manager saw the need to report on water risk, as this can better "reflect the reality" (Interviewee 6). The water expert added that:

"One thing we are working at the moment is trying to give a bit more contexts to our reporting. What is often not there is context of sites they are operating, how much is available in the watershed they are taking from and how much is being used. What's the sustainable usage and what percentage of their operations water usage out of the total watershed. The context-based water metric is important. We are trying to think about this now to provide our stakeholders with more information. If a company operates sustainably they could you could have an operation that is most efficient in the industry, but in the watershed where is much water stressed even that water usage is not good and the operations probably shouldn't be there, so the aim is to give stakeholder that sort of information on context. That's fine you are operating very efficiently, but where are you operating. A lot of corporate entities like [BeerCo] sit on a lot of data. When we do this water risk assessment we found a whole lot of information about the watershed and the dynamic of watershed, very little that data that is actually published ever and what sort of platform and metrics can we use put that data". (Interviewee 5)

The quote is consistent with the normative view in the literature that highlights the importance of preparing a complete sustainability report for both financial and non-financial stakeholders (see, Boiral, 2013; Tregidga et al., 2014; Cho et al., 2015). The sustainability reporting manager and the water expert's wishes of 'completing' the water efficiency figure through adding some context-based water disclosures, however, is compromised by a strong pragmatic view resonated within BeerCo. The head of water asserted that:

"By making the case that water efficiency is not important, I think they make themselves not credible. So it's important that NGOs appreciate that saving the water is good for the company and it's good for the environment and we should all do it, as companies, as businesses, as government and as NGOs. By saying efficiency in water (is important) we were not saying that the watershed has dropped". (Interviewee 2)

The incompleteness of the water efficiency figure is not seen by the head of water as a problem, as "we were not saying that the watershed has dropped". This phenomenon has been noted by

Power (2007), who argues that incomplete representation will be tolerable by practitioners if right actions are being undertaken. The pragmatic contention was echoed by BeerCo's Senior Vice President in a more explicit way:

“If we did that report (context-based water disclosures), we might well say, ‘actually, there’s nowhere in the world that our use of the local water resource is high enough, above five per cent, or above two per cent, for it to be a problem.’ But that wouldn’t actually stop it being a problem because if there is water tension in a certain place, the local government could decide to cut off a brewery because it’s the easiest high-profile action to take and disadvantages the least people, even if the brewery uses a very small amount of water. It’s a political act. That’s hypothetical. What I’m saying is it’s a good idea but it won’t be enough. The more important piece is the local contextual work, partnerships, partnership development and working collaboratively with partners to actually manage the water risk”. (Interviewee 1)

It can be seen from the quote that relative to adding water risk reporting, the Senior Vice President prefers taking actions to mitigate water risk on the ground, which can be interpreted by Jordan and Messner’s (2012, p.551) argument that for practitioners, “doing something had priority over measuring it”. In the confirmatory interview, the VP further countered the GRI, CDP and NGO members’ recommendations for providing a complete report:

“It’s over-engineered. GRI has just become its own monster because it’s so full of people who believe in process over material action. And there’s lots of people on there from business associations, trade union representation and vested companies, but I think it’s a process that’s run away with itself and my view is that investors do not need that level of process rigour, like A+ or whatever it is, to actually get to the heart of the core issues that a company needs to be working on. The kind of A+ level of the new standards – it’s just too much BS. Too much process, too much waste of time. to get, is it A+ the highest standard? To get that agreed the whole process you have to go through annually in terms of reporting, the topics you have to cover, the process for engaging stakeholders in that – it’s too onerous and it’s too much. And **if you have limited resource within a company, if I have the whole of [internal water expert] for a year, right, I would rather he spent 95% of his time on the ground with the breweries developing and implementing mitigation plans on water risk than going through lots and lots of hoops and tick boxes to report on the GRI process at the end of the year**”. (Interviewee 1)

The lengthy quote especially the highlighted part reiterates his pragmatic stance that taking actions to solve problems is more important than preparing a complete sustainability report. The senior management’s pragmatic view might be the primary reason why while water risk assessment and actions have been undertaken, the corresponding disclosures are still limited⁷.

⁷ The researcher closely reads BeerCo’s water-related disclosures in their corporate sustainability reports 2007-2016 and found that water risk-related information was rarely touched upon in the reports 2007-2015. In its 2016 report, BeerCo listed four types of water risk, but the space that these disclosures take up is less than half a page out of a more than 40-page report.

The lack of water risk disclosures is also caused by the low demand for such information from the intended audiences of BeerCo's sustainability report. According to BeerCo's sustainability reporting manager, investors and NGOs are deemed as the main audiences of their sustainability reports. While investors are concerned about the water risk facing beverage companies, they are not interested in the disaggregated site level risk information. Investors only need to be reassured that company has undertaken a company-wide risk assessment and has solutions in place to mitigate the risk such as what has been done by BeerCo through Graph 5.4. These matters have been reported to investors via 'regular conversations' (Interviewee 5), the internal water expert suggested, and therefore it is almost resonated within BeerCo that the value of disclosing detailed water risk facing a particular brewery through their sustainability report or CDP water questionnaire is limited:

"I find investors come to speak to me and asked me also the question. I said why don't read the CDP report, because The CDP writes to me, they say I am ringing on behalf of investors, they (investors) say "no no no no, I (investors) ask my own questions". They speak to me, I will never read the questionnaire. They want to understand most do we understand our water risk. They sometime want to see, just to see if it (water risk assessment and the risk mitigation plan) is there. I can see if I, I've shown you one site now, so I can aggregate that into, (investors say) oh oh, that's interesting yes yes ok. The detail is not (important), they just want to know that I understand the water risk". (Interviewee 2)

"CDP asks too much data. I don't know why they need so much data. We can't see too much value. CDP said they are on behalf of investors, but I don't think investors use such detailed data". (Interviewee 5)

In relation to CDP water questionnaire, a senior management at beverage industry association strongly questioned:

"From a water standpoint some of the questions are very open-ended, very ambiguous, and those aren't value adding. Those aren't adding any value because you can respond as a responder. Excuse my French but I can write bullshit in there. We call it puppy stories. Puppy stories are, every company has a nice story to tell about their water use. 'In this plant we did that. Over here we did this. Over there we did that.' Those are nice, what we call puppy stories. You know a puppy as a dog, a little baby dog? Cute, cuddly, feel good, love them, right? That's a puppy. Every company has a puppy story. **What we have heard the investors tell us is 'We don't care about the puppy stories.' CDP has many questions that lead to respondents basically telling puppy stories. We don't care about your puppy story**". (Interviewee 19)

Taking the three quotes above together, it can be discerned that investors are pragmatists as well. They only require a basic degree of water risk reporting to reassure their investment decision rather than pursue a series of complete water risk disclosures. An NGO member who has intensive engagement with investors lamented that "I don't think investors care necessarily about companies'

reporting on water...I love to say investors care about the environment, but investors care about the money” (Interviewee 11). The researcher argues that investors’ low demand for water risk information further allows BeerCo’s pragmatic view about external reporting to proliferate, because prioritising action over reporting is not problematised by its key audience.

The lack of complete water reporting is also caused by NGO members’ ambivalent attitude towards the need for such disclosures. In Section 5.5 the researcher has mentioned NGO’s criticism about the water efficiency figure for its failure to account for the hydrological and social context. An NGO member, who contested the water efficiency figure, however, paradoxically argued that:

“They (BeerCo) check with us that they are assessing the right risks, that they’re analysing the answers correctly, and – the most important part to us – that they are developing the right strategy to respond to what they are learning from their team (water risk assessment). **Our interest is not so much the reporting, it’s how companies respond to what is uncovered by the reporting**”. (Interviewee 10)

The researcher realises that NGO members are pragmatists as well. While they have expressed concern about the incompleteness of the water efficiency reporting, they expect such incompleteness to be complemented more by water risk mitigation actions than by the water risk reporting. That NGOs’ primary concern lies in corporate water risk mitigation actions is confirmed by an exchange between the researcher and the internal water expert:

“The researcher: In our last interview, you mentioned WWF was involved in your water risk assessment and reporting process and actively challenged you, saying “you should be looking at this; you should be thinking about that”. What’s their primary concern? Can you provide an example?

Internal water expert: Yeah, because they look at our water risk programme and I mean last year we took them through a very detailed process of going through what we do and how we do it, and they challenge us on, you know, **whether our response actions were enough**, so are we looking at the issue at the right scale basically. They’ve got a very detailed understanding in terms of what we do and, you know, our water risk programme they helped us develop, so they wouldn’t be challenging us on how we assess our risk – it’s more how we’re responding”. (Interviewee 5)

An important factor that underpins the NGOs’ ambivalent attitude towards the incompleteness of the water efficiency reporting is their pragmatic view on accountability. NGOs’ demand for corporate accountability is on a need rather than a normative basis. To put it another way, their requirement for companies to report context-based water disclosures through sustainability reports will diminish if they have obtained such information through other channels. The Senior VP revealed that:

“The NGOs, through our partnership, see a lot of data that is not publicly reported. A lot of data. Probably all of it so there’s not secrets really. No, we don’t report just to appease them”. (Interviewee 1)

Therefore, it is understandable that NGOs criticise the incompleteness of the water efficiency reporting whilst paradoxically thinking that such incompleteness is secondary to water risk mitigation actions, because BeerCo has shared water risk information with them through dialogue and partnership. This is not necessarily problematic, however, just as Roberts (1991, 2009) points out accountability can be realised through dialogue as well as transparency.

To summarise, this section explains why BeerCo’s incomplete water efficiency reporting is more complemented by water risk mitigation action than by water risk reporting. The paper explains this phenomenon with reference to the pragmatic view. BeerCo’s head of water and the senior VP are pragmatists, who prefer solving problems through actions to preparing a complete report. Their pragmatism goes unchallenged by investors and NGOs, because the former has little interest in the disaggregated water risk information and the latter has already obtained such data through partnership. Taken these together, it is unsurprising that BeerCo’s water risk reporting lags behind its water risk assessment and the risk mitigation actions.

5.6 Conclusion

While the rate of sustainability reporting grows constantly (KPMG, 2017), the quality of these disclosures receives considerable criticism in the accounting literature. The reporting content is argued to be partial, incomplete and driven by a concern for maintaining legitimacy. Some studies go on to explicitly infer that corporate sustainability disclosures are disconnected from the large domain of organisational actions (see, Neu et al., 1998; Boiral, 2013; Cho et al., 2015). Such inference is also alluded to by De Villiers and Van Staden (2006), Cho and Patten (2007) and Tregidga et al. (2014). The aim of this study is to problematise this taken-for-granted inference that is widely shared in the sustainability reporting literature. The researcher concurs with the prior literature and believe that corporate sustainability reporting is incomplete and motivated by a concern for legitimacy, but this does not necessarily mean that the reporting content is disconnected from organisational actions. This paper examines this inference in the context of corporate water reporting, which is dominated by the water efficiency figure. It is found that the water efficiency figure is incomplete and is reported externally in a bid to appease investors. It provides the researcher with a valuable context to explore the inference of prior literature, namely

is an incomplete and legitimacy driven reporting necessarily disconnected from organisational actions? The researcher finds that the water efficiency reporting is not only accompanied by large amounts of internal water saving actions, but also is complemented by a company-wide water risk assessment and the resultant water risk mitigation actions. The researcher then goes on to explore why the case company elects to complement the incomplete water efficiency figure through water risk mitigation actions as opposed to water risk reporting. It is found that the reason lies in that both the case company's senior management and the intended audiences of its sustainability report, namely investors and NGOs are pragmatists, which means they inherently prioritise problem solving through actions over completing the incomplete water reporting.

Drawing on these findings, the researcher makes at least two interrelated contributions to the sustainability reporting literature. First, prior sustainability reporting literature has devoted to criticising the intention and quality of corporate sustainability reports for more than two decades. Drawing on the pragmatic view on incompleteness, this paper provides a contrasting argument. The researcher argues that an incomplete and legitimacy driven sustainability report is not necessarily problematic, as it has the potential to be 'completed' by actions that are unknown to researchers. The researcher hopes that this pragmatic view can complement prior literature and advance our understandings of the sustainability reporting phenomenon. Given this pragmatic view that reporting cannot exclusively cover organisational actions, a rounded evaluation of the quality of corporate sustainability reports requires not only report analysis but more importantly calls for more in-depth fieldwork to follow the inscriptions and observe corporate actions on the ground. This relates to the second contribution of this study. Second, the researcher hopes that this study has an implication for the application of fieldwork research method into the area of sustainability reporting. According to Merchant and Van der Stede (2006), while field-based research method has generated significant contributions to the management accounting literature, the method is still less adopted in other accounting topics. They suggest that field research method "should be used more by researchers in other areas of accounting" (p.118). The researchers at the forefront of sustainability reporting argue that this area calls for in-depth fieldwork to add more insights (see, Hopwood, 2009; Cho et al., 2015; O'Dwyer and Unerman, 2016), but up to now the call has received little attention. The lack of field-based research in this area may be caused by the fact that "the probability of such companies allowing detailed probings can hardly be high when so much is at stake for their image and reputation" (Hopwood, 2009, p.438). That said, Hopwood

goes on to point out that “But one hopes that this does not prevent active members of the research community from at least trying” (p.438). Hopwood’s initiative resonates with ‘the principle of the hiding hand’ (Hirschman, 1967), which suggests that overestimating difficulties of doing something in advance is misleading, because some difficulties will be offset by the creativity inspired in the process of trying. At the beginning stage of this fieldwork, the rate of response from the targeted interviewees was very low, but through rewording the invitation email and trying to invite interviewees via LinkedIn, this fieldwork materialised. The researcher hopes this study can energise more researchers to undertake fieldwork into this area and produce alternative angles to look at the sustainability reporting phenomenon.

The limitations of this paper perhaps lie in generalisability and the researcher’s expertise. After all, this paper is informed by fieldwork into one beverage company. One could argue that findings derived from a single case study lack generalisability. The researcher concedes that this could be a potential limitation. Nonetheless, this paper also draws on interviews with a large number of NGO members, who are collaborating with a wide range of organisations including the case company on the ground to mitigate water risk. Therefore, their comments on water reporting are not peculiar to the case company but represent their concerns about the importance of taking action in general. In addition, findings of this paper may also be limited by the researcher’s expertise. For example, during fieldwork interviewees argue that this method of operation can potentially save certain amounts of water. The researcher’s accounting expertise is incapable of judging the truth or falsity of such arguments. This limitation calls for further interdisciplinary research to complement and as is mentioned above the researcher hopes that this paper can energise more field research into the area of sustainability reporting.

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Chapter 6 (Paper 3) Limitation or reflection: a methodological choice

Abstract

Through interrelating the positivistic proposal for self-reporting limitations of academic work and the interpretive emphasis on the need for making reflections, the researcher contributes to the methodological literature by informing accounting interpretivists of the need to reflect upon a series of aspects that may condition their research findings such as researcher's idiosyncrasy, alternative theoretical perspectives and alternative voices in the field. The need for such reflection is urgent as currently interpretive studies' practice of writing limitations is polarised: limitations are either totally left out or only reduced to the concern for generalisability of research findings. The researcher then draws on Alvesson et al. (2008) and uses two of my own working papers as a context to exemplify how to reflect upon these aspects that are essential to interpretive studies. Another contribution of this paper lies in the argument that self-reporting limitations as a form of reflection is not only valuable for its own sake, but can complement two key notions rooted in the interpretive studies, that is, authenticity and plausibility and has potential to enable dialogue across positivistic and interpretive research paradigms.

6.1 Introduction

“Our wish for the next decade is that all manuscripts will include a separate section offering an honest and realistic assessment of the limitations of the research together with consequences of such limitations for the interpretation of results and implications. In other words, this separate section would offer a clear and detailed description of each limitation together with a clear and detailed description of how results and conclusions are affected by this limitation” (Aguinis and Edwards, 2014, p.166).

As the quote indicates, the importance of self-reporting substantive limitations of academic work in an honest manner is more and more recognised by the leading-edge methodologists (Brutus and Duniewicz, 2012; Brutus, Aguinis and Wassmer, 2013; Aguinis and Edwards, 2014). The concern for limitations of academic study is essential, because all studies involve trade-off and simplification and thus are imperfect. The methodological literature fails to provide a precise definition for ‘limitation’, but in practice self-reported limitations are reduced to a concern for external validity (generalisability⁸) (Brutus et al., 2013). In this sense, the researcher argues that the notion of limitation is more suitable for assessing findings from positivistic studies, because positivism assumes the possibility of generalising research findings to the whole population and thus the failure of realising so could be counted as a limitation. Interpretivism however, is founded on a far more modest epistemology and assumes that any single study in nature can only provide an incomplete interpretation of the reality (Burrell and Morgan, 1979; Law, 1994; Ahrens and Chapman, 2006; Suddaby, 2006; Power and Gendron, 2015; Chapman, 2018; Alvesson and Sköldbberg, 2018; Busco and Quattrone, 2018). Therefore, interpretivists see the coexistence of alternatives as given as opposed to limitations.

While from an interpretive perspective, the coexistence of alternatives cannot be counted as a limitation, interpretations and applications of findings from interpretive studies are equally conditioned by alternative theoretical perspectives, alternative voices in the field, researcher’s idiosyncrasy and research politics (Alvesson et al., 2008). Hence, authors of reflexive work have a duty to reflect on these aspects of research and readers of reflexive work have a right to know such contextual information (Alvesson and Sköldbberg, 2018). Transparency in alternative views is argued to be able to result in less authoritative but more plausible knowledge (Alvesson et al., 2008) and have the potential to achieve a holistic understanding of the empirical phenomenon

⁸ Positivistic studies tend to focus on discussing generalisability in a statistical sense, namely to what extent research findings can be generalised to the whole population whereas interpretive studies are more inclined to argue that their findings can be generalised to the chosen theory (Cooper and Morgan, 2008).

(Power and Gendron, 2015). Therefore, the researcher takes in the spirit of positivistic methodological literature's recommendation for self-reporting limitations whilst updating their notion of limitation to the need for reflecting upon the context of interpretive studies.

The researcher further argues that Alvesson et al. (2008) provides a useful framework for reflecting upon the context of interpretive studies. Alvesson's other methodological work has been widely adopted by the leading-edge accounting methodologists as an effective guidance for conducting fieldwork (see, Ahrens and Chapman, 2006; Lukka and Modell, 2010; Qu and Dumay, 2011), perhaps because the emphasis he gives on alternative interpretations is compatible with the nature of interpretivism. The suggestion for reflecting upon the research context and Alvesson et al.'s (2008) framework is particularly important and urgent for interpretive accounting literature, because 'corridor conversation' suggests that currently accounting interpretive studies' practice of writing limitations is polarised: limitations are either totally left out or reduced only to the concern for generalisability of research findings. In order to support this argument, the researcher undertakes an exploratory analysis of 13 interpretive field studies published in two elite accounting journals, namely Accounting, Organisation and Society (AOS) and Contemporary Accounting Research (CAR). It is tentatively found that self-reported limitations of CAR papers highly centre around generalisability of research findings whereas papers published in AOS remain silent about their limitations. These stylised self-reported limitations are more likely to be imagined as a product of journal politics than an honest account of caveats on the context of research findings, however.

Given the apparent lack of reflections, the researcher draws on Alvesson et al. (2008) and chooses two of my working papers⁹ as a context to exemplify how to reflect upon the aspects that are essential to interpretive studies. The choice is sensible because deep familiarity with the underlying fieldwork is essential to considering how the field experience is then distilled down into the limits of output writings. It is found that interpretations and applications of findings from interpretive research are conditioned by the researcher's idiosyncrasy, expertise and language skill as well as by alternative theoretical perspectives, alternative voices in the field and journal politics. On this basis, it will be further argued that reflections on these aspects of research are not only valuable

⁹ They refer to the first two papers of this thesis. Given that they are still unpublished, in what follows the researcher refers to them as Working Paper 1 and Working Paper 2.

for its own sake, but also have the potential to complement two key notions rooted in the interpretive field studies, that is, authenticity and plausibility and has potential to enable dialogue across research paradigms.

Based on these arguments, the researcher makes contributions to at least two groups of methodological literature. First, while thanks to a series of methodological studies such as Ahrens and Chapman (2006), Lukka and Modell (2010) and Golden-Biddle and Locke (1993), interpretive accounting research has become more sensitive to methodologically appropriate evaluative criteria such as authenticity and plausibility, their way of writing limitations in practice is still positivism oriented to some extent. The study complements Ahrens and Chapman (2006) and Lukka and Modell (2010) by suggesting adding ‘reflexivity’ as the third criterion to engage with the inevitability of the imperfection of interpretive accounting studies. Second, the importance of enhancing communication between positivist and interpretivist accounting researchers has long been recognised (see, Ahrens and Chapman, 2006; Lukka and Modell, 2010; Ahrens, 2008; Kakkuri-Knuuttila, Lukka and Kuorikoski, 2008; Chapman, 2012; Power and Gendron, 2015; Chapman, 2018; Kenno, McCracken and Salterio, 2017; Eendenich and Trapp, 2018). This study contributes to this debate by proposing that reflecting on alternatives could be an opportunity to talk with researchers in other paradigms.

The rest of this paper will proceed as follows: in Section 6.2 the researcher will elaborate why the notion of reflection is more suitable than limitation in terms of engaging with the imperfection of interpretive studies. This will be followed by Section 6.3, in which the researcher will introduce Alvesson et al.’s (2008) reflective framework and argue that this framework provides interpretive researchers with a helpful guidance to think about the context of research findings. Section 6.4 offers an explanation as to why Alvesson et al.’s (2008) framework is particularly important and urgent for interpretive accounting literature by analysing self-reported limitations of 13 field studies published in AOS and CAR. Subsequently, in Section 6.5 the researcher draws on Alvesson’s reflexive framework and uses the author’s two working papers as a context to think about which aspects of interpretive research are particularly worth reflecting upon beyond generalisability of research findings. Finally, it will be argued in Section 6.6 that self-reporting limitations is not only valuable for its own sake, but can complement two key notions rooted in the interpretive field studies, that is, authenticity and plausibility and has potential to enable dialogue across research paradigms.

6.2 From positivistic call for self-reporting limitations to interpretive suggestion for making reflections

The importance of self-reporting substantive limitations of academic work in an honest manner is more and more recognised by the leading-edge positivistic methodologists, because the application and interpretation of the research findings are significantly conditioned by the limitations of their studies (Brutus and Duniewicz, 2012; Brutus, Aguinis and Wassmer, 2013; Aguinis and Edwards, 2014). These methodological literature fails to provide a precise definition for the limitation of academic work, however they identify that in practice the most common way of addressing academic limitations is to discuss the generalisability of research findings (Brutus et al., 2013). In this sense, limitation is more likely to be the product of the positivism culture, which assumes the existence of a complete and stable reality and assumes the possibility of shedding light on the reality by any single study. Therefore, any failure of generalising research findings to the whole population/reality and the resultant failure of realising such an idealistic methodological assumption could be counted as a limitation.

This logic is unsuitable to assess the quality of interpretive studies, however. While interpretivism is not postmodernism nor relativism and thus does not negate the existence of a reality beyond the researchers' spiritual world, interpretivism is founded on a far more modest epistemology than positivism (Suddaby, 2015). Interpretivists begin with the acknowledgement that any single study inherently can only provide an incomplete interpretation of the world (Busco and Quattrone, 2018) and therefore the holistic understanding of an empirical phenomenon is unable to be achieved by any single study but might be realised via knowledge accumulation arising from contributions of many studies. In other words, interpretivists see the failure of generalising research findings to certain domains of the reality as given as opposed to a limitation.

While the idea of limitation is highly attached to positivism, it raises the concern that all academic studies are products of simplification and trade-off and thus research findings always coexist with a wide range of alternative emic and etic views. From an interpretive perspective, these alternative views form the context, in which the focal study is produced, and condition the application and interpretation of its research findings (Alvesson and Sköldberg, 2018). As such, while the existence of alternative voices and views could not be counted as a limitation from an interpretive perspective, readers are entitled to such contextual information.

Overall, the researcher follows the positivistic suggestion for self-reporting limitations whilst adapting the idea of limitation to the notions of ‘contextualisation’ and ‘reflection’ for interpretive studies. This contention resonates with Ioannidis (2007, p.324), who argues that discussion of limitations is valuable for its potential of “placing the current work in context”. The importance of reflecting on research context is particularly emphasised by Alvesson in his methodological work (see, Alvesson et al., 2008; Alvesson and Sköldberg, 2018). It is articulated that:

“Thus in reflective empirical research the centre of gravity is shifted from the handling of empirical material towards, as far as possible, a consideration of the perceptual, cognitive, theoretical, linguistic, (inter) textual, political and cultural circumstances that form the backdrop to – as well as impregnate – the interpretations (Alvesson and Sköldberg, 2018, p.11)”.

In this section, we have learned the importance of reflecting upon the context of interpretive studies. In what follows the researcher will introduce Alvesson’s reflexive methodology and mobilise the reflexive framework he and his colleagues proposed to think about the context (limitations) of interpretive studies.

6.3 Mats Alvesson’s reflexive methodology and the framework for reflecting upon the context of interpretive studies

Mats Alvesson’s reflexive methodology is a compromise between realism (empiricism) and postmodernism. More than half a century ago, Mill (1959) discerns that “empiricism”, which contends that rigorous research methods and techniques plus a large amount of data can discover the truth, pervades the academia. Alvesson, Gabriel and Paulsen (2017) and Alvesson and Sköldberg (2018) go on to argue that more than 50 years later the notion of ‘empiricism’ becomes all the more prevalent. Alvesson and Sköldberg (2018, p.2) fundamentally reject ‘empiricism’ by arguing that:

“The critics of empiricism—ranging from historians of science, sociologists of knowledge, psychologists of science and linguistic scholars to ideological critics and philosophers—claim that culture, language, selective perception, subjective forms of cognition, social conventions, politics, ideology, power and narration all, in a complicated way, permeate scientific activity”.

They contend that all these personal, social and political elements that are woven into the knowledge production process are worth reflection, but their insistence on reflexivity is less extreme than postmodernists, who fundamentally negate the potential of knowledge to represent an external reality (See, Butler, 2002). While Alvesson and his colleagues take in the spirit of scepticism from postmodernists, they part company with the latter by emphasising that:

“It is pragmatically fruitful to assume the existence of a reality beyond the researcher’s egocentricity and the ethnocentricity of the research community (paradigms, consciousness, text, rhetorical manoeuvring), and that we as researchers should be able to say something insightful about this reality”. (Alvesson and Sköldberg, 2018, p.3)

Alvesson’s reflexive methodology recognises researchers’ potential to abstract an empirical phenomenon into knowledge whilst confessing that none of research findings is escapable from researchers’ idiosyncrasy, pre-understanding and theoretical interests. The former allows researchers to contribute to knowledge whilst the latter requires researchers to make reflections simultaneously. For Alvesson, reflections are a necessary and inevitable concomitant of research findings. By the time the former is produced, the latter should be made visible to the audience.

Alvesson et al. (2008) tease out four interrelated aspects that are often reflected upon by prior literature and name them as ‘multi-perspective, multi-voicing, positioning and destabilising’, respectively. Reflexivity as multi-perspective aims to problematise the highly specialised research convention. Most academic papers are only written for one theoretical community, though it is widely known that a phenomenon can be better understood with reference to multiple theories. The data supportive of alternative theories might be the prerequisite for the establishment of the theory in question. Transparency in such conditions of theorising can help produce less extreme and less authoritative but more plausible knowledge.

Multi-voicing practice concerns the relationship between the researcher and other voices in the field and specifically it is about how the former can authentically speak for the latter. This point is worth introspection, because the voices that are seen by the audience are not out there, but are first elicited by the researcher during the interview (Alvesson, 2003) and then kept by the researcher in the writing up stage at the expense of other voices that are equally elicited by the interview (Alvesson et al., 2008). While Alvesson’s reflexive methodology is not postmodernism and so it recognises that theory formation is inseparable from the deletion of certain voices in the field, it is worth asking if certain voices in the field are marginalised or deleted due to the researcher’s idiosyncrasy. Are there any marginalised voices especially those, which had been visualised, readers’ interpretation of the story would have been altered? Which voices have to be concealed so that the work can be deemed as meaningful?

The ‘positioning’ strategy traces the imprints of political factors left on research findings. This concern is inspired by Actor-Network Theorists, who contend that science and politics are inextricably interwoven (Latour, 1987). It is argued that all research activities take place within a

specific community and thus the knowledge they produce is likely to be shaped by the norm of that research community or society at large. As such, it is worthwhile reflecting on whether a certain interpretation or theory is chosen because it is perceived to be more acceptable within a specific research community. Similarly, it is also meaningful to consider whether the institutionalised norms of a society predominate researchers' thinking and the subsequent research activities.

Alvesson's 'destabilising' reflexive strategy stems from postmodernism, which is built on relativism and pursues irreducible pluralism. Postmodernism contends that truth is not universally acceptable but is relative to the preoccupied theoretical framework of the judging subject (Butler, 2002). For postmodernists, all knowledge is unfair and dangerous, as it will privilege certain social groups whilst marginalising others. Inspired by these arguments, Alvesson et al. (2008) emphasise the need to reflect on the consequence of the constructed knowledge. A potential consequence of academic work is that empirical data that fits into the intended theoretical lens will be privileged or even exaggerated. Authors have a responsibility to reflect on such impact on readers.

Up to this point, the researcher has led readers to review Alvesson's four reflexive strategies, but before applying this framework, three additional points need to be clarified. First, while Alvesson and his colleagues highlight the value of practising the reflexive methodology, they recognise that any single reflexive strategy has its own weakness (Alvesson et al., 2008). The weakness of multi-perspective strategy lies in that researcher will be faced with countless alternative theories and thus how to combine them with the chosen theory is complex and challenging. Overemphasising theoretical pluralism is likely to lead researchers to 'worship' multiple paradigms, which may not always result in an incremental understanding of the phenomenon. The multi-voicing approach is constrained by the fact that it is impossible to give an equal voice to all actors in the field. Reflecting through the positioning strategy is liable to cultivate narcissistic and heroic authors (Alvesson et al., 2008), who are immersed in repudiating conventions in a cynical way, though the criticism they offer may not always be insightful. The problem with the 'destabilising' practice lies in that it is always leveraged to critique others rather than to create more meaningful knowledge. These limitations of reflection will equally be borne in mind in the process of practising Alvesson's framework.

Second, Alvesson et al. (2008, p.496) warn that,

“the questions we raise are not intended to be exhaustive nor are the four sets of practices a complete account of reflexive practices... Interpretivist readers, on the other hand, might note that a map does not need to be accurate to be useful: the accuracy of a map may be less important than whether and how it is consumed”.

Therefore, the researcher mobilises Alvesson’s reflective framework as a means for thinking about the context of interpretive studies, rather than prove this framework is correct in a deductive manner. As such, the content of the following reflections may not fit in neatly with these four categories.

Third, it must be noted that reflection is more encompassing than the positivistic notion of limitation. The following reflections comprise not only limitations in a positivistic sense but also other contextual information that condition research findings. With Alvesson’s reflective framework and these three notes in mind, the researcher will now start assessing the limitation-related articulations of interpretive field studies published in two elite accounting journals.

6.4 Politics of addressing limitations

This section focuses on examining how the contexts (limitations) are addressed in prior interpretive accounting studies and will comment on these limitation-related texts with reference to Alvesson’s reflexive framework. Specifically, seven field studies published in AOS 2015 and six papers in CAR between 2015 and 2018 are analysed with a view to teasing out the ways in which they reflect on the limitations of their articles. The analysis here is illustrative rather than exhaustive. Studies are chosen from AOS and CAR, because arguably these two journals represent interpretive field studies with highest quality. Papers that are chosen from CAR span a longer period of time in a bid to increase sample size, which makes it relatively comparable with the number of papers chosen from AOS.

A close reading of the introduction, method and conclusion sections of the chosen papers suggests that field studies published in AOS tend to remain silent about their limitations (4/7) or mix up limitations and suggestions for future research (2/7) whereas CAR papers’ discussion about limitation is more explicit and consistent, which revolves around the generalisability of research findings (5/6). The researcher’s analysis here is based on the self-reported limitations that are explicitly revealed in the introduction, method and conclusion sections of the chosen papers, but it is likely that some limitations that are implied in the field material section are overlooked. These papers’ self-reported limitations are listed as follows:

Table 6.1 Limitation-related articulations in AOS and CAR papers

Article/CAR	Limitation-related articulations	Summary of the key concern
Free and Murphy (2015) CAR	<p>“This study is subject to a number of limitations. Given access limitations, interviewee recruitment in this research was opportunistic, as is the case in a good deal of crime research...Further, in some instances, we were unable to cross-validate information with official records or media reports. Due to the nature of recruiting, we also acknowledge a selection bias...However, we believe that the steps we took to overcome these challenges, such as assurances of confidentiality, eliminating participants who were not forthcoming or claimed to be innocent, broad recruitment protocols, and secondary source verifications wherever possible, mitigate these concerns and provide some assurance as to the trustworthiness of the data...”</p> <p>p.47</p>	Trustworthiness of the data
Griffith, Hammersley and Kadous (2015) CAR	<p>“We sought very experienced auditors as interviewees because they are likely to provide the most useful insights into the process of auditing estimates and the associated problems. Very experienced auditors have access to the entire process of auditing estimates in their roles as reviewers and past preparers, while staff members and seniors know the details of only a few steps in the process. They also have experience with a greater number and variety of clients, which increases the generalisability of their interview responses...”. P.838</p>	Generalisability
Westermann, Bedard and Earley (2015) CAR	<p>“...qualitative research often involves trade-offs between studying a phenomenon in depth and having the ability to generalise results more broadly. Although we have attempted to collect interviews representing a variety of partner perspectives within a large firm, the aim of our research is not to statistically generalise to all audit firms in a state of permanence”. P.893</p>	Generalisability
Cooper, Ezzamel and Qu (2017) CAR	<p>“Though there could be a concern that focusing on the BSC limits the validity of our conclusions, we find that other ideas enter into our history (such as intellectual capital, strategy, and knowledge management), as various actors customize the BSC to suit their own needs and traditions. Rather than attempt to examine many such ideas and practices, we argue that it is better to focus on one. We make no claims to empirical generalisation, for example about the attributes of the BSC or other accounting technologies and innovations. Nor do we offer general prescriptions about strategies of innovators or promoters of ideas. However, we do make theoretical generalisations about the translation processes, and the role of problematisation in producing strategic agency as OPPs”.</p> <p>P.1020</p>	Generalisability

Cohen, Krishnamoorthy and Wright (2017) CAR	“One limitation though is that our sample was primarily in the midrange of companies in terms of size. A future study could explore how ERM is implemented in large companies, which are especially prone to reputation and other strategic risks. A second limitation is that the companies in our study may be at various stages with respect to their experience and maturity related to ERM, which affects the generalisability of the findings”. P.1205	Generalisability
Ahrens (2018) CAR	“As an initial exploration into anchoring in a management control context, this study has some limitations and is also suggestive of a series of questions for future research. An important limitation is that this paper relies on a field study in only one organization. Notably, the anchor practice identified in this organization was very bureaucratic. This need not be the case in other organizations...”. P.83	Generalisability
Article/AOS	Limitation-related articulations	Summary of the key concern
Joyce and Walker (2015) AOS	No explicitly mentioned limitation	No
Caramanis, Dedoulis and Leventis (2015) AOS	<p>“Our study shares limitations inherent to a qualitative methodology. In addition, we acknowledge that one of the authors (referred to in the paper as “Academic”) served as a member of ELTE’s accounting arm for two years (2005–2007). To reduce the risk of subjectivity and bias, we note that the paper is mostly based on publically-available written evidence, unrelated to the Academic. In addition, all semi-structured interviews cited herein have been conducted by the other co-authors”. P.17</p> <p>“Further research is undoubtedly necessary to establish the generalisability of our findings and their relevance to other locales”. P.28</p>	Subjectivity and generalisability.
O’Sullivan and O’Dwyer (2015) AOS	“A number of limitations along with related opportunities for future research arise from this study. First, we predominantly unveil the contentious nature of (social) movement interactions in issue-based field structuration, but there could also be more explicitly collaborative efforts involved (see, Van Wijk et al., 2013). While we unveil some, albeit limited, evidence of collaboration in the later stages of our case, future research could explore how intense collaborations between external and internal movements can shape issue-based field structuration in order to advance our theorizations of how collaborative relationships may shape issue-based fields”. P.50	Mix limitation with future research
Ezzamel and Xiao (2015) AOS	No explicitly mentioned limitation	No
Mehrpouya (2015) AOS	No explicitly mentioned limitation	No

Suddaby, Saxton and Gunz (2015) AOS	“This research, however, offers only a preliminary glimpse into the process of domain change within the context of social media. Our research focuses on the early stages of new media adoption, so more longitudinal studies will help to elaborate the processes of institutional work that are involved in later phases. Similarly, our study offers a gross overview of the adoption practices of new media across US and Canadian firms. More detailed ethnographic studies involving a single firm over time might offer a more focused analysis of the subjective and interpretive processes of individual professionals, both accounting and social media experts, over time”. P.67	Mix with future research limitation
Yang and Modell (2015) AOS	No explicitly mentioned limitation	No

As for the papers published in CAR, it is worth noting that generalisability of research findings, albeit important, pertains to the positivistic concern. Interpretivism never aims for generalising research findings of any single study to the whole population (Busco and Quattrone, 2018) and thus it is inappropriate to deem the failure of achieving so as a limitation. It is understandable that, however, authors of CAR papers feel the need to apologise for lacking generalisability of their findings, as the journal traditionally embraces positivistic studies, though it is more and more open to interpretive field research (Salterio, 2018). As the mainstream audience of the journal are positivism oriented, lacking statistical generalisability is likely to be perceived as a limitation. The excessive focus on generalisability is not peculiar to the accounting literature. Brutus, Aguinis and Wassmer (2013) identify that a large proportion of the papers published in prestigious management journals are immersed in discussing their external validity (generalisability). They (p.63) argue that the concern for generalisability pervades academic articles, perhaps because it is an ‘easy target’ in terms of writing limitations. Similarly, Aguinis and Edwards (2014, p.166) critique that:

“A manuscript may include a generic statement about external validity such as ‘our study addressed one sample only, so future research should be conducted using additional samples’. In this way, authors may feel they have ‘checked off’ the limitations box”.

Perhaps the most problematic effect of the preoccupation with discussing generalisability of research findings lies in that it may deflect authors as well as readers’ attention from focusing on other equally important aspects such as alternative voices in the field, alternative perspectives and politics of research (Alvesson et al., 2008). The lack of addressing these important aspects are apparent in these analysed CAR papers. Of all six CAR papers chosen, only Free and Murphy

(2015) briefly mention that the participation of their interviewees is opportunistic, which may imply that there are endless alternative voices going on in the field. Nonetheless, they fail to go on to address how their findings are affected by such research design.

Relative to field studies published in CAR, AOS papers prefer not to discuss their limitations explicitly. This is perhaps because AOS papers deem themselves as pertaining to the interpretive paradigm, where generalisability of research findings is of less relevance. As the notion of limitation is reduced to a concern for generalisability, the former is likely to be dropped together with the latter. This further evidences the need for replacing the idea of writing limitations with the notion of reflection, as the latter could allow researchers to reflect on other important aspects such as the aforementioned alternative voices in the field, alternative perspectives, researchers' idiosyncrasy and politics of research (Alvesson et al., 2008). In other words, that lacking generalisability is not a limitation does not necessarily mean that the research is perfect.

AOS papers are also inclined to engage with the incompleteness of their studies by discussing what is left unexplored but can be explored in future research. The University of Southern California's online research guides (available at: <http://libguides.usc.edu/writingguide/limitations>), however, hints at the difference between limitations of research findings and suggestions for future research:

“All studies have limitations. However, it is important that you restrict your discussion to limitations related to the research problem under investigation. For example, if a meta-analysis of existing literature is not a stated purpose of your research, it should not be discussed as a limitation. **Do not apologize for not addressing issues that you did not promise to investigate in the introduction of your paper**” (emphasis in the original).

It can be deduced from the quote that suggestions for future research cannot always be counted as limitations. Brutus, Aguinis and Wassmer (2013, p.49) argue that pressure from publication provides “motives for not acknowledging limitations and for offering only benign directions for future research”. They go on to suggest that while some limitations can be complemented by future research, “replicating the same information under both headings is redundant and not a good use of valuable journal space and reader time” (p.67).

Given these analyses above, the researcher questions the adequacy of setting these self-reported limitations in AOS and CAR papers as examples of writing the limitation section of accounting field studies. To further figure out how to write limitations of interpretive studies, the researcher will reflect on the context of the two working papers with reference to Alvesson's reflexive framework in the following sections.

6.5 The researcher's idiosyncrasy and other contextual factors

Before going into details of the reflections on each of the two working papers, this section will discuss the imprints of several non-technical factors on them both in general. These factors at least include the researcher's idiosyncrasy, composition of my supervisory team and some institutionalised conventions. The discussion of these factors is inspired by both Alvesson's reflexive methodology in general and his reflexive strategy about 'positioning' specifically, which highlight the importance of personal, political and institutional factors in shaping research findings.

Many years ago, my father told me that simply repeating other people's words makes little sense. This principle had a profound effect on my growing up as well as on the come-into-being of the two working papers. Most of the literature that I¹⁰ touched at the outset of my PhD revolved around legitimacy theory and stakeholder theory, which left me an impression that sustainability reporting is ill-motivated and serves only for shareholders' interests. I wanted to tell a different story, a relatively positive story. While the story I told is neither made up nor deductively derived from the intended theories, my subjectivity especially the ambition to tell a different story may have been inevitably woven into the texts. Given that both working papers indeed focus on the positive aspects of sustainability reporting, readers of them are particularly entitled to know the potential influence of the author's subjectivity. Another subjective factor that is worth mentioning is that I aspire to publish at least one paper from my PhD in an elite academic journal. As I am interested in field research and in the accounting discipline, AOS is the community that I hoped to engage with, within reason. While I remain open to sustainability reporting-related studies published in other journals such as CAR, Accounting, Auditing and Accountability Journal, Accounting and Business Research, European Accounting Review, Human Relations, Organisation and Organisation Science, a large proportion of my readings comes from AOS and thus to some extent it can be argued that the two working papers are 'positioned' by the debates in AOS, though AOS itself comprises various and diversified theoretical debates and I remained open to these debates.

Another important non-technical factor that influences the two working papers is the composition of my supervisory team. All PhD students are deeply influenced by their doctoral training experience. Alvesson and Sköldberg (2018) even name a series of people including PhD supervisors as 'ghost authors'. In this regard, I am not an exception, though there is no doubt that

¹⁰ The first-person pronoun is intentionally used in the chapter to show my idiosyncrasy.

I take full responsibility for all the mistakes made in this thesis. I am privileged to work with two established professors, whose research interest and work primarily revolve around sustainability reporting and management accounting. This allows the researcher to look at sustainability reporting practice through the lens that appear in management accounting literature such as Jordan and Messner (2012). As Alvesson points out that reflections are not necessarily limitations but encompass considerations about positive effects such as unpacking the phenomenon through an alternative perspective. As such, I would argue that diversity of my supervisory team is more likely to be the strength of my PhD, but readers are entitled to such contextual information.

The come-into-being of the two working papers is also inseparable from political and institutional factors. In this regard, the most notable influence may be the adoption of the three-paper approach, which has the potential to place the PhD student in an advantageous position in the job market. The disadvantage of the three-paper approach, however lies in that it may over-partition field materials so that any single paper loses its due details and depth. This is not my case, however. The three-paper approach was proposed and adopted in the late stage of my PhD, when my supervisors saw that I had collected sufficient data including more than 50 interviews, two observations and considerable documentary analysis. More importantly, from fieldwork I discerned that the connection between working paper 1 that focuses on the ‘materiality’ principle and working paper 2 that investigates the ‘completeness’ principle is weak in the field and thus piecing them together is unable to generate more insights into the phenomenon but will create a ‘full picture’ that runs counter to the logic in the field. In this situation, the three-paper approach was considered to be more compatible with the data collected and thus adopted.

Above are the reflections on the overarching factors that may influence both working papers. The researcher will now move on to reflecting upon the aspects that are peculiar to each of them, but for readers’ information these reflections will be preceded by a brief review of these two papers.

6.5.1 A brief description of Working Paper 1 for general audiences

Working paper 1 explores the potential of the matrix format of transparency to enable dialogue in the context of sustainability reporting. Global Reporting Initiative (GRI) forms an indispensable part of the context of this paper. GRI was founded in 1997 as a non-profit organisation and since then has developed a series of sustainability reporting guidelines, which set de facto standards for transparency in corporate economic, social and environmental performance (Etzion and Ferraro,

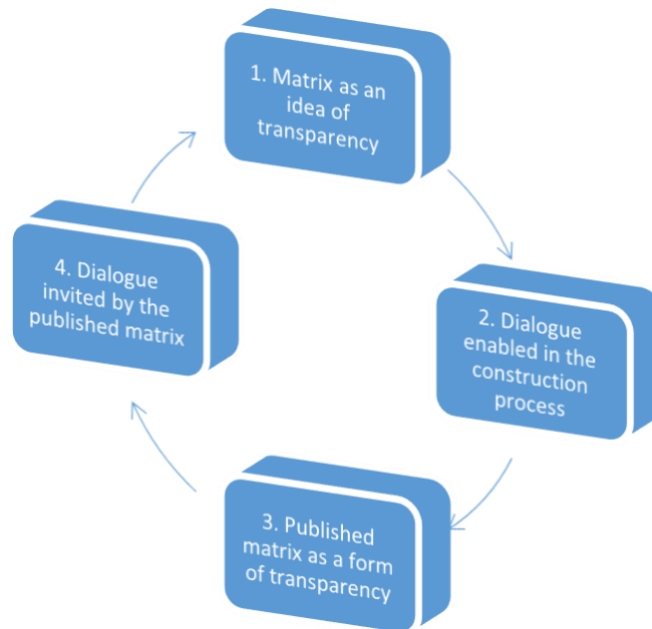
2010). GRI G4 guidelines (2013) recommend that organisations prepare a materiality matrix that places influences on stakeholders on one axis and the importance of each issue to the reporting entity on the other. At corporate level, the sustainability department and sustainability reporting managers are responsible for practising GRI's guidelines and preparing materiality matrix. In most cases, sustainability reporting managers will prepare a preliminary matrix based on their own analysis. After that, the matrix will be circulated to other internal functions as well as to external stakeholders with a view to testing the validity of the ranking on their self-constructed matrix. Meanwhile, the power of the matrix comes into play. It is argued that at least four interrelated material features of the matrix allow it to enable colleagues in other departments and external stakeholders to volunteer to engage in dialogue with sustainability reporting managers.

First, matrices compared with other formats of reporting such as numbers and narratives are more visible and pictorial and thus are more likely to capture readers' attention. Second, matrices are more agonistic. The relative importance of each issue is explicit on the matrix. This character is liable to entice other organisational members, especially those who are responsible for the issues that are deemed as less material on the matrix to question the reporting manager. Third, matrix is always an incomplete representation, as it fails to provide an account as to why some issues are deemed as more material than others and what the follow-up strategies and actions for these material issues are. Such incompleteness has the potential to stimulate readers' curiosity and prompt them to question reporting managers. Finally, materiality matrix carries a metaphoric meaning, which can help readers make sense of the matrix. For this paper, the name "materiality" attached to the matrix connotes the meaning of materiality in financial terms, i.e. 5% of EBIT (earnings before interest and tax), which is well established and resonates within the business. As such, internal colleagues are likely to make sense of the materiality matrix by imagining the concept of financial materiality and more importantly they may become interested in debating with the preparer of the matrix when it is found that the meaning conveyed by the materiality matrix is significantly different from their understanding of materiality in financial terms.

After the construction of matrix is complete and published on the reporting entity's webpage, these material features continue to perform and engage stakeholders who are not involved in the materiality matrix construction process into a dialogue with sustainability reporting managers. As interlocutors include influential NGOs and investors, their interests in corporate materiality matrix further drive reporting managers to undertake materiality assessment and prepare the matrix in

next iteration. On the basis of these articulations, the researcher constructs the ‘Accountability Wheel’ as follows:

Graph 6.2 Accountability Wheel



6.5.2 Reflections on Working Paper 1 through the angle of ‘multi-perspective’

While working paper 1 highlights the effects of graphical inscriptions (matrices), the researcher is not a proponent of material-determinism (Law, 1994), that is to say, the researcher is not intended to argue that graphical inscriptions alone can change the world. Rather, the effects of graphical inscriptions are conditioned by several aspects within the explanatory scope of legitimacy theory and stakeholder theory.

A large number of studies in the accounting literature have substantiated that corporate sustainability reporting is motivated by a concern for legitimacy (see, Neu et al., 1998; Milne and Patten, 2002; Deegan, 2002; De Villiers and Van Staden, 2006; Cho and Patten, 2007; Aerts and Cormier, 2009). As the GRI guidelines are viewed as legitimate standards for corporate sustainability reporting (Etzion and Ferraro, 2010), companies will seek to live up to the requirements of the GRI in an attempt to maintain their legitimacy within society.

It has been mentioned that GRI G4 guidelines (2013) recommend that organisations prepare a materiality matrix that places “Influences on stakeholder assessments and decisions” on one axis and “Significance of economic, environmental and social impacts” on the other. In order to

establish or maintain legitimacy, companies are likely to follow these guidelines to undertake materiality assessment and present the result of their assessment in the form of a matrix. As such, drawing on the theory of legitimacy, the researcher more clearly sees that GRI is an indispensable impetus to the movement of the accountability wheel.

On this basis, the researcher argues that legitimacy and the role played by the GRI are important conditions of the functions of the matrix. Without the influence of the GRI, sustainability reporting managers are less likely to prepare materiality matrix on a regular basis. As the GRI is so influential that companies have to adopt its recommendations, readers may ask why we need the theory of inscription beyond legitimacy theory. The reason lies in that the GRI guidelines comprise various formats of disclosures including not only matrix but also texts and numbers. The researcher argues that the matrix format of reporting given its material features is more liable to enable dialogue than other reporting formats. An exchange between the researcher and a subject matter expert can provide corroborating evidence on this point:

“Interviewer: GRI and CDP also ask many narrative and numeric questions. Do you think these questions can also enable more internal discussion?”

RES: No, I mean not really, in a sense that the sort of information that they’re asking for, we have internal discussions with some projects on that - we do that anyway in any case; it’s not as a result of GRI or CDP that we’re having these discussions – it’s because it’s something we do anyway”.

Therefore, we can see the complementarity between the theory of legitimacy and the theory of inscription, two theories in completely different paradigms. The former fleshes out the indispensable role played by the GRI. This is an important condition of the establishment of the latter whilst the latter can complement the former, by suggesting that equally under the influence of the GRI, different reporting formats will generate different effects.

In addition, the movement of the accountability wheel might not be clearly understood without mentioning stakeholder theory. The application of stakeholder theory in the accounting literature suggests that the power of stakeholders decides the level and substance of sustainability disclosures (Roberts, 1992; Cooper and Owen, 2007). A small number of the interviewed reporting managers revealed that Dow Jones Sustainability Index (DJSI) regularly asks questions about their materiality matrices, be it in the form of questionnaire or dialogue in real time:

“We do know for example that certain analysts, especially rating agencies like DJSI and others, they do look at the materiality matrix and they ask questions about the three most

material issues, for example; what targets do you have, what strategy do you link these areas to accepted remuneration; those kinds of things”.

In this regard, we can see the interplay between the notion of inscription, which focuses on the effect of objects and stakeholder theory, which emphasises the power of people. Specifically, on the one hand, the theory of inscription allows the researcher to see that the material features of the published matrix effectively capture investors’ attention and engage them into a dialogue with sustainability reporting managers. On the other hand, the power of investors in turn impacts upon the reporting entity and prompt reporting managers to undertake materiality assessment regularly, as they can see the potential economic benefits arising from investors’ interest in the matrix. Therefore, in addition to the GRI’s legitimacy, investors’ interest in the matrix would be another important impetus to the rotation of the accountability wheel.

In working paper 1, the researcher indeed mentioned the role of the GRI and investors’ interest in materiality matrix, but these articulations remain descriptive. Relative to the matrix-related field materials that have already been abstracted to the conceptual level through the theory of inscription, the description of the GRI and investors is liable to be overlooked especially by those who are unfamiliar with the context of sustainability reporting. Certainly, it can be argued that the GRI and investors are both actors and thus can generate effects. In this way, it seems that the accountability wheel can be explained by ANT alone. This is not wrong, but might slide into theory tautology. As all people and objects can be theorised as actors, the GRI and investors would lose the emphasis that they could have received under the lens of legitimacy and stakeholder theories.

6.5.3 Reflections on Working Paper 1 through the angle of ‘multi-voicing’

The difficulty that I experienced in the process of writing up working paper 1 is that as Alvesson et al. (2008) and Ahrens and Chapman (2006) point out, ‘field’ does not always allow authors to develop their favourite theory. There are always some voices in the field that precisely run counter to the researcher’s intended theorisation. We have learned that from an interpretive point of view, the existence of alternative voices cannot be counted as a limitation, but readers are entitled to know such contextual information. A controversial point revolves around the potential of the published matrix to enable dialogue. It is almost unanimously agreed within the interviewees that material features of the matrix have potential to enable dialogue across the divisional boundaries within the business. Nevertheless, when it comes to the potential of the published matrix to enable dialogue with external stakeholders, a sustainability reporting manager does not think that the

effect of the materiality matrix can be disentangled from the effect of the whole sustainability report. The comment is extracted as follows:

“I mean we get comments and feedback on the report as a whole. I haven’t had any comments or feedback on the materiality specifically”.

The researcher is unable to reconcile this argument with the quotes that support the published matrix’s potential to enable dialogue. Perhaps, the best way to deal with the paradox in the field is to make them transparent to the audience.

Another controversial point lies in whether dialogue happening within materiality process can enable corporate decisions to be made in favour of sustainability. While the paper primarily looks at the potential of the graphical format of transparency to enable dialogue, it is also argued that dialogue with stakeholders could amplify sustainability department’s voice within the business. However, a sustainability reporting manager revealed an example, which completely contradicts this argument:

“We started trying to push forwards for a much larger scale introduction to try and switch over 20 percent of our electricity coming from renewable sources which we think would be quite an important issue, energy stability, avoiding long term energy price rises that sort of thing, but because it would have impacted the bottom line in the short term with the investment required and had a long payback it was deemed as unimportant, not desirable...People would just say ‘We’re already busy working on the stuff that’s easy. Why are you bringing us more problems? If you really think it’s a problem go and fix it yourself,’...Our CEO often used to say, no-one has ever asked me in any board briefing - board report briefing - about our environmental policy. The city just doesn’t care about that sort of thing apparently. I’m not sure I believe that but that’s what she used to say”.

As the company in question is of ill repute and in the process of redundancy, I am not surprised that their senior management dismissed the proposal for renewable energy. Nonetheless, the quote does not fully support the causal law between dialogue and decision-making. It is still valid that dialogue with stakeholders allows sustainability reporting managers to have a greater right to speak within the business, but the effect of their voices might be more uncertain than my or the readers’ expectations. There are numerous other voices concurrently taking place within and outside of these reporting entities, which may impact upon decision-making but beyond my reach. For example, whether materiality matrix can enable dialogue between the Chief Sustainability Officer and members in the boardroom and further inform corporate decision-making? I was not there and this requires more in-depth ethnography to complement.

6.5.4 Reflections on Working Paper 1 through the angle of ‘destabilising’

In this section, the researcher will reflect on the consequence of the formation of working paper 1. There are at least two threads in the accountability literature. For one thing, the work of John Roberts and Unerman and Bennett (2004) view accountability more as dialogue and focus on virtues of dialogue per se. For another, Cooper and Owen (2007), Archel, Husillos and Spence (2011) and Brown and Tregidga (2017) are more interested in the effect of dialogue on decision-making. For them, dialogue is less effective unless it can inform the decision to be made in the interests of broad stakeholders. The second stream of literature is equally important, so I think I have a duty to warn readers not to deflect their attention away from focusing on decision-making after reading this paper. Whether or not dialogue enabled by materiality matrix can inform corporate decision-making is still an important question and calls for future research.

Nevertheless, the researcher argues that even for proponents of the second stream literature, findings from working paper 1 may still be valid, though the evidence as to whether dialogue enabled by materiality matrix can inform corporate decision-making is limited in this paper. People tend to think that dialogue may not necessarily result in better decision-making, but once an informed decision is made, dialogue must have taken place by default. This point is debatable, as Latour (2004) describes that a decision that favours the interest of natural environment can be made with reference to scientific assessments whilst little dialogue taking place in the meanwhile. As such, the researcher argues that dialogue should be placed on an equal footing with decision-making rather than being inferior to the latter.

Another consequence that I hope to warn the readers to avoid is that ANT is not material determinism, so while working paper 1 teases out the potential of graphical inscriptions to enable dialogue, it does not necessarily mean that all the sustainability-related dialogue within and outside of the business is decided by the matrix. Sometimes, dialogue is just a routine of organisational life. Sometimes, dialogue is enabled by ambitious sustainability reporting managers. As such, I hope that working paper 1 will not leave an exaggerated impression that a two-by-two matrix can change the world!

6.5.5 Reflections on Working Paper 2

Working paper 2 problematises an entrenched view underpinned by legitimacy theory in the sustainability reporting literature. Accounting literature witnesses that legitimacy theory and its

variants play a dominant role in explaining the motivations for sustainability reporting. It is further inferred that as sustainability reporting is a legitimising tool, the reporting content is disconnected from organisational actions (see, Neu, Warsame and Pedwell, 1998; De Villiers and Van Staden, 2006; Laine, 2009; Boiral, 2013; Tregidga et al., 2014; Cho et al., 2015). Through fieldwork into a public listed beverage company and examining its water disclosures, the paper provides a contrasting argument. It is found the case company's water efficiency reporting is not only accompanied by internal water saving actions, but also is complemented by a company-wide water risk assessment and the resultant actions to mitigate external water risk. The researcher explains the phenomenon that companies prefer taking actions to mobilising the reporting strategy to tackle the problem, with reference to the pragmatic view developed by Power (2007) and Jordan and Messner (2012), which suggests that practitioners inherently prioritise action over reporting.

As working paper 2 is informed by a single case study, generalisability is likely to be perceived as a limitation. In this regard, Lukka and Kasanen (1995), Cooper and Morgan (2008), Power and Gendron (2015) and Parker and Northcott (2016) have emphasised that statistical generalisation is unsuitable for evaluating qualitative field studies and should be replaced by the notion of analytic generalisability. Such contention is not peculiar to the interpretive community. In the most recent edition of Yin's (2014, p.21) positivistic landmark methodological book, he insists that:

“Case studies, like experiments, are generalisable to theoretical propositions and not to populations or universe. In this sense, the case study, like to experiment, does not represent a “sample,” and in doing case study research, your goal will be to expand and generalise theories (analytic generalisations) and not to extrapolate probabilities (statistical generalisations)”.

Within the stream of analytic generalisation, conclusion of a study is viewed as a ‘working hypothesis’, the generalisability of which depends on the fitness between the context of research site and the context of use (Cronbach, 1975). In this regard, Lincoln and Guba (2000, p.40) propose a widely acknowledged argument:

“How can one tell whether a working hypothesis developed in Context A might be applicable in Context B? We suggest that the answer to that question must be empirical: the degree of transferability is a direct function of the similarity between the two contexts, what we shall call ‘fittingness’. Fittingness is defined as the degree of congruence between sending and receiving contexts. If Context A and Context B are ‘sufficiently’ congruent, then working hypotheses from the sending originating context may be applicable in the receiving context”.

As the receiving context is unknown to the author, the author's responsibility for generalisation lies in presenting the context and conditions of the study in a clear way and leaves for the reader to decide whether the argument can be generalised to the receiving context (Gobo, 2008). As for working paper 2, the context lies in who hold this pragmatic view in the field. It can be seen from the paper that the pragmatic view is shared by not only the case company's senior management, but also the surrounding stakeholders such as NGOs and investors. The researcher argues that due to at least two reasons, the pragmatic view is applicable to more than the case company. First, there is no doubt that these NGO members and investors will engage with more than the case company and thus their pragmatic view might be concurrently influencing other organisations. Second, by the time of writing this paper, the Senior Vice President of the case company has been promoted to be the Chief Sustainability Officer of another listed company and the internal water expert has also accepted a more senior position at a peer company. The staff mobility ensures that the pragmatic view may have been brought to other companies. That said, the researcher never means to generalise the pragmatic view to the whole population and advises readers to apply the finding in combination with the context of use.

The conclusion of working paper 2 might also be limited by the researcher's expertise and language skill. The paper argues that the case company has taken tangible actions to mitigate water risk for the company as well as to protect water sources for the surrounding stakeholders, but the researcher is not a hydrologist, that is to say, while for example I saw a well was closed, I was not sure as to how ground water and aquifers can benefit from this action. As another example, during site visiting, when the plant manager introduced that their new filtration system consumes less water than before, I am unable to judge the truth or falsity of such description through my accounting expertise.

In addition, the quality of a small number of the interviews might be compromised by the level of my listening and spoken English. The University of Southern California's online research guides (available at: <http://libguides.usc.edu/writingguide/limitations>) has reminded that fluency in a language might be a limitation of a study. It is articulated that:

“if your research focuses on measuring the perceived value of after-school tutoring among Mexican-American ESL [English as a Second Language] students, for example, and you are not fluent in Spanish, you are limited in being able to read and interpret Spanish language research studies on the topic or to speak with these students in their primary language. This deficiency should be acknowledged”.

My level of proficiency in English is considered as a limitation of working paper 2 only as opposed to both working papers, because having been studied in English-speaking countries for more than six years, I am able to communicate several topics that I am familiar with such as accounting, reporting and university teaching in English effectively. Therefore, as interviews of working paper 1 revolve around materiality, an accounting concept that I am familiar with, language was not experienced as a barrier of communication. Unlike working paper 1, interviews of the second working paper touch upon considerable hydrological language, some of which are inaccessible to me at the time of the first contact. While I have taken steps to remedy this issue such as validating interview transcripts by a professional transcription firm and sending transcripts to interviewees for confirmation, readers are entitled to know this potential limitation.

6.5.6 Reflections of interpretive accounting field studies: more than apologising for lacking generalisability

With reference to Alvesson's reflexive framework, the researcher has reflected upon the contextual factors that condition the findings from two working papers. These reflections are restated as follows:

Table 6.3 A summary of reflections

Reflections on the whole thesis	The researcher's ambition to tell a different story and the aspiration to publish a paper in an elite journal; composition of my supervisory team; the monograph convention vs emerging three-paper approach.
Reflections on Working Paper 1	Alternative perspectives; marginalised voices in the field; consequence of the research.
Reflections on Working Paper 2	Generalisability; the researcher's expertise and proficiency in a language.

From the content of the table, we can see that research findings are being conditioned by a wide range of aspects and thus a stylised statement such as lacking generalisability makes little sense or may be even counterproductive if it deflects readers from focusing on other contextual information. This evidences the need for extending Aguinis and Edwards' (2014) call for self-reporting limitations to the need for reflecting upon the context of interpretive studies.

6.6 Complementing authenticity and plausibility and enabling dialogue with positivists through the limitation section

It will be argued in this section that reflecting upon the context of interpretive accounting studies is not only necessary in its own right, but can complement two key notions rooted in the interpretive field studies, that is, authenticity and plausibility and has the potential to enhance communication between positivistic and interpretive research paradigms. Thanks to a series of methodological studies such as Ahrens and Chapman (2006) and Lukka and Modell (2010), interpretive accounting research has become more sensitive to methodologically appropriate evaluative criteria. Standards borrowed from positivistic studies such as validity and reliability have largely been replaced by the notion of authenticity and plausibility. Authenticity considers whether authors can provide a thick account to demonstrate he or she was there (in the field) whilst plausibility focuses on whether the study can provide an explanation that makes sense to the intended audience.

Lukka and Modell (2010) go on to argue that authenticity and plausibility might conflict with each other. Drawing on the concepts of ‘counterfactual conditionals’ and ‘contrast classes’, they articulate that to provide a rigorous, plausible and ‘truly valid’ explanation (plausibility) requires the research question to be radically narrow (p.466). Such ‘real’ explanation can materialise but inevitably at the expense of authenticity, that is, the rich and thick description of the phenomenon in question and its context. The researcher does not oppose the ‘narrow’ and specialised research tradition, as Power and Gendron (2015) point out research specialisation can provide ‘cumulative and incremental’ understanding of a social phenomenon. In this regard, the main body of a paper can be used to explore the explanation of a narrowly-defined empirical phenomenon. Nevertheless, this does not preclude the possibility of restoring some of the sacrificed authenticity in the reflection section. In what follows, the researcher will use the reflections of working paper 1 to illustrate this point.

The main body of working paper 1 was used to arrive at an explanation of a narrowly-defined empirical phenomenon. It is found that the material features of matrices (inscriptions) have the potential to enable dialogue across various departments of a company as well as between the company and its external stakeholders. This theoretical argument might sound plausible to the ANT community, which is more interested in the effect of an object. Accompanying this ‘success’, however, two interrelated issues may arise simultaneously.

First, while ANT is not material determinism (Law, 1994), an ANT-informed storyline would give less emphasis to the agency of human actor than object. The investor's interest in the matrix must be a stimulus to the reappearance of the matrix in next iteration. This is mentioned in the main texts but given less emphasis than the material features of matrices. In addition, the notion of inscription narrows the study down to the power of matrices, but the power of matrices is inseparable from the legitimacy of the GRI. To put it another way, the legitimacy of the GRI is an indispensable condition of the power of matrices in the context of sustainability reporting. Likewise, the role of the GRI is mentioned but received less emphasis in the main texts. What is more, as is revealed in Section 5.3, several alternative voices that run counter to the intended theory were also concealed from the audience. This might be what Lukka and Modell (2010) describe as the materialisation of plausibility at the expense of authenticity.

The lack of authenticity is likely to result in the second issue, namely, undermining the plausibility in the eye of researchers in other paradigms or audience in general. Ahrens and Chapman (2006) and Lukka and Modell (2010) may have known, but it would be better to make it explicit that plausibility is an unstable concept. Argument that is deemed as plausible by a specialised theoretical group may sound contrived or even absurd to other research communities or audience in general. As an example, in the absence of legitimacy and stakeholder theories, the effects of graphical inscriptions may sound implausible to researchers in the positivistic paradigm.

The researcher argues that the sacrificed authenticity and plausibility can be supplemented by adding a separate reflection section at the end of a study. Drawing on Alvesson's reflexive strategy, the researcher has reflected on alternative theories that condition the effects of graphical inscriptions, other voices that are not visualised in the main texts, the imprint of my idiosyncrasy on the storyline and the potential consequence of this paper. In so doing, the study is re-contextualised. Some of the sacrificed authenticity is restored. More importantly, with these contextual information, the story might be more plausible and accessible to researchers in other paradigms or audience in general.

In the accounting discipline, an increasing number of senior researchers have strived to facilitate communication between positivistic and interpretive paradigms through which social phenomenon can be holistically understood (see, Ahrens and Chapman, 2006; Lukka and Modell, 2010; Ahrens, 2008; Kakkuri-Knuuttila, Lukka and Kuorikoski, 2008; Chapman, 2012; Power and Gendron,

2015; Chapman, 2018; Kenno, McCracken and Salterio, 2017; Eendenich and Trapp, 2018). Among them, language inaccessibility is regarded by positivists as a major barrier for cross-paradigm communication such that:

“While such research (interpretive field study) is academically important and valid..., it takes careful reading to understand how the concerns of this literature help inform the debates in more positivist accounting research” (Kenno et al., 2017, p.78-79).

The interpretive paradigm replies as follows:

“Our research questions and answers are never written in plain language, rather they sit in complex webs of significance that we bring to bear in reading any text. Particular words and phrases conjure up complex webs of association relating to important theories, methods, individual researchers, interesting and outdated debates, etc. These webs of associations greatly facilitate the clarity, brevity and precision of our communications within communities of experts, but represents a significant challenge in talking across them” (Chapman, 2018, p.49-50).

In this regard, the researcher argues that such debate can be somewhat reconciled through making reflections. While with Chapman the researcher believes that some theoretical language guards the rigour and plausibility to a specialised research community, this does not preclude the possibility of writing up a reflection section, whereby specialised discourse can be translated into relatively plain language and communicated to researchers in other paradigms such as the examples provided in Section 5.2. Instead of naming ‘GRI’ and ‘Investor’ as actors, the researcher explains their role through the lens of legitimacy and stakeholder theories and hopefully this effort can enable communication with positivists. This reflection process, especially the multi-perspective strategy also requires the researcher to cite theories that often adopted in the positivistic research paradigm. This is crucial for cross-paradigm communication, as Patriotta (2017) in an editorial of *Journal of Management Studies* points out that academic conversation requires citing other scholars’ work. In the accounting literature, however, “it is well-known that papers within one accounting paradigm only infrequently refer to articles published in another” (Power and Gendron, 2015, p.159). The researcher argues that adding a separate reflection section can encourage researchers to consider and cite studies in other paradigms and enable what Power and Gendron called ‘republic of methods’, which means communicating findings with scholars in other paradigms.

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Chapter 7 Epilogue

This chapter offers closing remarks on this thesis. The thesis begins with three introductory chapters in a bid to familiarise readers with the contexts including academic papers that have inspired the researcher and field materials that the researcher encountered. The researcher then presents three articles derived from fieldwork and formatted them according to the conventions of academic journal paper publications. In this concluding chapter, the researcher will reiterate academic contributions of all three papers, articulate the connections among the three papers, discuss their implications for practice and provide suggestions for future research.

The first paper (Chapter 4) is undertaken in the context of corporate materiality assessment and specifically it focuses on the resultant materiality matrix. In this context, the paper engages with two forms of accountability in the literature, i.e. accountability as transparency and accountability as dialogue. The literature suggests that the transparency form of accountability is ubiquitous within society but the pursuit of complete transparency is problematic whereas accountability as dialogue is valuable but given power differentials and spatial distance this form of accountability rarely happens. The researcher argues that we can mobilise the strengths of both forms of accountability simultaneously by leveraging transparency as a means for enabling dialogue. In this way, dialogue can be enabled whilst once transparency is treated as a means, the adverse effects caused by the pursuit of complete transparency can be weakened. These propositions are substantiated in the context of corporate materiality assessment. It is found that corporate materiality matrix as a form of transparency has the potential to enable dialogue across corporate divisional boundaries as well as between the reporting entity and its stakeholders.

The second paper (Chapter 5) further explores the core debate in the sustainability reporting literature as to whether corporate sustainability reporting content is connected with the underlying organisational actions. Specifically, legitimacy theory contends that as sustainability reporting is a legitimising tool, the reporting content is rarely followed by organisational actions on the ground (Neu et al., 1998). That is to say, the literature criticises that companies fail to walk the talk in their sustainability reports. This paper problematises this argument in the context of corporate water reporting. Through fieldwork into a public listed beverage company in the UK, the researcher finds that the case company's water efficiency reporting is not only accompanied by water saving actions inside of its breweries, but also is complemented by a company-wide water risk assessment and

the resultant actions to mitigate external water risk. On this basis, the researcher argues that the case company not only walks the talk but also do more than they say in the sustainability report.

The third paper (Chapter 6) synthesises the positivistic proposal for self-reporting limitations of academic work and the interpretive emphasis on the need for making reflections, and on this basis argues that interpretive accounting studies need to reflect upon a series of aspects that condition their research findings such as researcher's idiosyncrasy, alternative theoretical perspectives and alternative voices in the field. The need for such reflection is urgent as currently interpretive studies' practice of writing limitations is polarised: limitations are either totally left out or only reduced to the concern for generalisability of research findings. The researcher then recommends that future studies can make reflections with reference to Alvesson et al.'s (2008) framework. In addition, the paper also argues that self-reporting limitations as a form of reflection is not only valuable for its own sake, but can complement two criteria that are central to interpretive studies, that is, authenticity and plausibility and has the potential to enable dialogue between positivistic and interpretive research paradigms.

It has been explained in Chapter 3 that the three-paper approach is adopted, because the connection between materiality principle and completeness principle in the field is limited. Practitioners interpret these two principles relatively separately during the interview. While field materials are partitioned into three papers, their common implication for practice allows them to be properly considered as products of an overarching intellectual process of undertaking a PhD. The first two papers both shed light on the effects of sustainability reporting principles provided by the GRI. They inform the researcher that the principle of materiality has more potential to contribute to sustainable development, because corporate materiality assessment and the resultant matrix are likely to enable dialogue between the reporting entity and its stakeholders, whereas the value of the completeness principle is limited, because noncompliance with the principle is not necessarily problematic, as an incomplete report may be being complemented by actions on the ground. The lesson carried forward from these two papers can be further mobilised as fruitful means for informing the GRI to develop more effective sustainability reporting guidelines in future.

A suggestion could be that, the GRI G3 guidelines introduce the sustainability reporting content index (also called G3 Checklist) comprising hundreds of performance indicators and qualitative disclosure requirement and argues that the checklist could increase the transparency of the

reporting entity (GRI, 2011). Since then G3 Checklist has been widely adopted by large companies to show their superior environmental performance (Clarkson et al., 2008). Findings from Paper 2 however, provides a contrasting argument. It has shown that an incomplete sustainability report does not necessarily indicate that the reporting entity's social and environmental performance is poor, as not all sustainability-related actions are formally disclosed in the sustainability report. As such, the researcher advises the GRI to be sceptical about the adequacy of using checklist as a measure of organisational transparency. On this basis, findings from Paper 1 can further suggest that instead of pursuing a complete sustainability report, what is required is a more engaging reporting format such as matrix. While information on the matrix is incomplete, it has the potential to enable dialogue, whereby useful information that is absent from the matrix has the potential to be communicated. Therefore, the researcher recommends GRI to shift attention from the preoccupation with the completeness of sustainability reporting content to the engaging potential of various reporting formats.

The connection between these two papers and Paper 3 (Chapter 6) lies in that it is the fieldwork that underpins the first two papers that allows the researcher to see the need for reflecting upon the context of interpretive studies. Reflections made in Paper 3 in turn engage readers with the imperfections of the first two papers and hopefully this can result in more plausible but less authoritative knowledge. These interconnections render the three papers to be parts of this PhD thesis. Finally, given that the limitations of the two empirical papers have already been discussed in the third paper, the researcher here will now directly jump to providing suggestions for future research.

The researcher in Chapter 6 has reflected upon the fact that a large proportion of the quotes in the first paper is derived from interviews with corporate sustainability reporting managers, who are at relatively lower organisational levels. As such, they as well as the researcher might be uncertain as to whether and how corporate materiality assessment and the resultant materiality matrix can enable dialogue in the boardroom and further inform high-level corporate decision-making. To further unpack the effect of corporate materiality assessment (Unerman and Zappettini, 2014), the researcher suggests that future studies could interview Chief Sustainability Officers, who are the highest officials in the corporate sustainability division and thus is closest to the realm of sustainability-related decision-making and materiality criteria. The researcher believes that such fieldwork has the potential to effectively extend the findings of Paper 1 (Chapter 4).

In addition, findings of the second paper (Chapter 5) and especially our understandings of incompleteness can be extended through interrelating interpretive accountability studies and positivistic accounting literature. On the one hand, the work of John Roberts and Parker (2014) argue that accountability can be rendered through dialogue and action whereas on the other hand, a few positivistic accounting studies especially the ones (see, Heflin et al., 2003; Akins et al., 2012) published in *The Accounting Review* highlight the importance of the US Regulation FD (Fair Disclosure), which “prohibits firms from privately disclosing value-relevant information to select securities markets professionals without simultaneously disclosing the same information to the public” (Heflin et al., 2003, p.1). That is to say, on the one hand, dialogue has its own strengths as a form of accountability whereas on the other hand, communicating information via private dialogue may lead to ‘privileged information’. The interrelation of these two groups of literature inspires the researcher to ask where is the dividing line between the effective use of dialogue as a form of accountability and the improper use of dialogue as a channel to disclose private information.

Finally, relative to corporate level sustainability reporting, national accountability reform is still under researched. Cooper and Owen (2007) and Archel et al. (2011) are two exceptions, which investigate British and Spanish national accountability reform, respectively. They both find that while non-financial stakeholders are consulted and are allowed to voice in the accountability reform process, final decision-making is still made in the interests of shareholders and investors. On this basis, Archel et al. (2011) argue that the value of such accountability reform is limited and stakeholder dialogue in the accountability reform process may serve for a legitimising purpose as it provides a false impression that the outcome results from a democratic discussion and is free from power. Their findings may be extended by further looking at the Chinese accountability reform that is now being undertaken. On June 6th 2017, China Securities Regulatory Commission signed an initiative called “on urging public listed companies to disclose environmental information” and suggested that this initiative aims to gradually build a mechanism to regulate companies listed on Shang Hai and Shen Zhen Stock Exchanges to report their environmental impacts on a regular basis. This initiative is now being developed by Shang Hai Stock Exchange into “Chinese Sustainability Reporting Guidelines” and according to an EY (2018) report, Shang Hai Stock Exchange will hold a series of public stakeholder consultation sessions to collect comments on the proposed reporting guideline in the year 2019. Gray (1992) suggests that socialist

and Marxist dominated societies have different power dynamics from western countries and thus the researcher believes that the Chinese accountability reform provides a valuable context to further unpack the accountability phenomenon at policy level.

Many thanks for reading this thesis

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